

# Governance and Firm Efficiency in Vietnam

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## NEDERLANDSTALIGE SAMENVATTING

Vietnam is tegenwoordig gekend als een van de meest dynamische opkomende landen, met snelle economische groei en ontwikkeling zoals gerapporteerd door de Wereldbank, in de Oost-Aziatische regio. Hoewel de ontwikkeling van Vietnam over de voorbije 30 jaar (na de “Doi moi” in 1986) opmerkelijk is, moet Vietnam nog steeds veel problemen oplossen om betere omstandigheden voor economische gezondheid en ontwikkeling te creëren. Volgens het rapport van de Heritage Foundation heeft Vietnam een score van 53,1 voor economische vrijheid, is Vietnam nummer 141 in een ranglijst van 180 landen en wordt Vietnam gekenmerkt als “voornamelijk onvrij”. Ook al zijn vele sub-indices verbeterd doorheen de tijd, toch zijn de meeste nog steeds laag. Als Vietnam zijn economie gezonder wil maken, moet het land de noodzaak erkennen om door te gaan met staatsbedrijven te hervormen, het reguleringsregime te verbeteren, het transparantieniveau te verhogen, het zwakke juridisch systeem te versterken en de bureaucratie te verminderen. Een beter lokaal bestuur kan een goed middel zijn om de ontwikkeling te pushen en de gezondheid van de Vietnamese economie te verbeteren. In deze dissertatie onderzoeken we de rol van bestuur als de input voor de productie van bedrijven door 3 problemen bij bestuur te beschouwen, namelijk corruptie, politieke connecties en sociaal kapitaal. De resultaten van deze dissertatie kunnen worden gebruikt als referentie voor een Vietnamese overheid met een beter begrip en een bredere uitkijk over de impact van lokaal bestuur op het verbeteren van de hele economie.

Het eerste onderzoeksproject onderzoekt de relatie tussen corruptie en bedrijfsgroei. Door verschillende eigendomsidentiteiten, waaronder staatsbezit, aandeelhouder en in buitenlandse handen, te gebruiken vinden we dat corruptie schadelijk kan zijn voor economische groei, vooral voor de bedrijfsgroei van aandeelhoudende bedrijven en bedrijven in buitenlands handen, en dat

corruptie staatsbedrijven bevoorrecht. Daarnaast kan het verbeteren van de kwaliteit van de lokale zakelijke omgeving corruptie intomen.

Het tweede onderzoeksproject onderzoekt of bedrijven voordeel kunnen halen uit hun politieke connecties. Wanneer we twee soorten politieke connecties, namelijk toegekende en verworven connecties, beschouwen, concluderen we dat bedrijven met beide soorten politieke connecties een lagere bedrijfswaarde hebben dan bedrijven zonder politieke connecties. Niettemin vinden we ook dat bedrijven met verworven politieke connecties en een geconcentreerde eigendomsstructuur een hogere bedrijfswaarde tonen dan bedrijven met een verspreide eigendomsstructuur en bedrijven die geen politieke connecties hebben. We vinden ook dat bedrijven met verworven politieke connecties een hogere bedrijfswaarde hebben dan bedrijven met toegekende politieke connecties.

Het derde onderzoeksproject onderzoekt of sociaal kapitaal, waaronder menselijk kapitaal op microniveau en sociale netwerken op macroniveau, een impact heeft op kredietbeslissingen en de groei van Vietnamese ‘home-based’ bedrijven. De resultaten tonen aan dat beide niveaus van sociaal kapitaal de informele lening keuze en de kredietkeuze tussen formele en informele leningen beïnvloeden. Ze tonen ook dat enkel het microniveau een impact heeft op de groei van ‘home-based’ bedrijven.

De dissertatie verloopt als volgt: hoofdstuk 1 behandelt het eerste onderzoeksproject dat de impact van corruptie op bedrijfsgroei onderzoekt. Vervolgens onderzoekt het tweede hoofdstuk de associatie tussen politieke connecties en bedrijfswaarde. Hoofdstuk 3 gaat over de impact van sociaal kapitaal op kredietkeuzes en de groei van ‘home-based’ bedrijven. Het laatste hoofdstuk vormt de conclusie van deze dissertatie en brengt ook enkele praktische implicaties, beperkingen en suggesties voor toekomstig onderzoek naar voor.

## **OVERVIEW OF THE DISSERTATION**

Vietnam is now known as one of the most dynamic emerging countries in East Asia, with rapid economic growth and development as reported by World Bank. Although the development of Vietnam over the last 30 years (after the “Doi moi” in 1986) is remarkable, but Vietnam now still needs to solve many problems to create a better environment for the economy and development. Based on the report of the Heritage Foundation, Vietnam’s economic freedom score is 53.1, ranked at 141 out of 180 countries and in the group of “mostly unfree”, with many sub-indices at a low level, although improving. In order to improve the economic health, Vietnam has to acknowledge the need to continue in reforming state-owned enterprises, improving regulation, increasing the level of transparency, bolstering the weak judicial system and decreasing the bureaucracy. A better local governance can be seen as a promising tool to push the development and improve the health of the Vietnamese economy. In this dissertation, we explore the role of governance as the input in producing firms’ output by considering three issues of governance, including corruption, political connections and social capital. The results from this dissertation can be seen as references for Vietnam’s Government for a better understanding and a broader view on the impacts of local governance in improving the economy as a whole.

The first research project examines the relation between corruption and firm growth. By using different ownership identities including state-owned, shareholding and foreign-owned enterprises, we find that corruption may harm economic growth, especially for the firm growth of shareholding and foreign-owned enterprises, but it favors state-owned enterprises. Besides, improving the quality of local business environment can help to mitigate corruption.

The second research project investigates whether firms can benefit from their political connections. By considering two types of political connections including ascribed and acquired ones, we conclude that firms with both types of political connections have lower firm value than those without political connections. However, acquired political connected firms with concentrated ownership exhibit higher firm values than those with diffuse ownership and non-political connected firms. We also find that firms with acquired political connections have higher firm values than those with ascribed political connections.

The third research project examines whether social capital, both on the micro level for human capital and the macro level for social network affects credit choices and growth of Vietnamese household businesses. The results document that both levels of social capital have an impact on informal loan choice and credit choice priority between formal loan and informal loan, but only the micro level has an effect on the growth of household businesses.

The dissertation proceeds as follows: Chapter 1 is the first research project that examines the impact of corruption on firm growth. It is followed by the second chapter that investigates the association between political connections and firm value. Chapter 3 is about the impact of social capital on credit choices and growth of household businesses. The final chapter concludes and summarizes and also provides some practical implications, limitations and suggestions for future research.

## **CHAPTER 1**

# **CORRUPTION, BUSINESS ENVIRONMENT AND FIRM GROWTH IN VIETNAM<sup>1</sup>**

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<sup>1</sup> This chapter is a joint work with Bao Bao Vuong (University of Economics, The University of Danang) and Michael Frömmel (UGent).

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## **ABSTRACT**

Corruption is fought by governments in both developing and developed countries since it can harm economic development. However, it has raised the question of why it still exists at a high level in emerging markets like Vietnam? With the data from surveys of World Bank, Vietnam Competitive Initiative and Vietnam Chamber of Commerce and Industry, the study provides details of the impact of corruption on firm growth and the effect of business environment on corruption at the firm-perceived level across different firm's ownership identities: state-owned enterprise (SOE), shareholding enterprise (SHE) and foreign-owned enterprise (FOE) in Vietnam. We demonstrate that corruption has a negative effect on the growth of firms with SHEs, FOEs and non-SOEs but positive in SOEs. We also document that the difference in the levels of corruption across different provinces can be influenced by the quality of the local business environment, but again, those impacts are heterogeneous in firms with different ownership identities.

***Keywords:*** Business Environment; Corruption; Firm growth; Emerging Market.

***JEL classification:*** G32, G38, O16, O53

## 1.1 Introduction

Corruption is a major issue in society and economics. Accordingly, interest in fighting corruption has increased. From 1998 to the present day, 42 countries have ratified the OECD Anti-Bribery Convention, complemented by the United Nation's convention against corruption from 2005 and the World Bank's Strengthening World Bank Group Engagement on Governance and Anticorruption (GAC) strategy launched in 2007. At the same time, academic interest in corruption has increased, resulting in numerous research articles, some of which are reviewed later in this article.

While corruption also occurs in developed countries, including some rather spectacular cases, it is really widespread in developing and emerging economies, and has become part of everyday life. *"In the developing world, corruption is public enemy number one"*, as World Bank president Jim Yong Kim stated<sup>2</sup>. In order to effectively fight corruption, however, it is crucial for policy makers and regulators to understand both the causes and effects of corruption.

In their recent survey, Eugen and Tosato (2017) discuss the results of empirical research on factors pushing corruption and its impact on the economy and society. A couple of factors reported there point at business environment, in which both firms and officials act. What is missing in the empirical literature up to now is an analysis of the impact of corruption across different ownership

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<sup>2</sup> See the World Bank's press release from December 19, 2013

(<http://www.worldbank.org/en/news/press-release/2013/12/19/corruption-developing-countries-world-bank-group-president-kim>)

identities. The aim of our chapter is to close this gap. We look at how SOE<sup>3</sup> vs. non-SOE, FOE<sup>4</sup> vs. non-FOE, and SHE vs. non-SHE as different ownership identities affect the results.

This analysis is carried out for the case of Vietnam for several reasons. First, Vietnam shows the typical picture of an emerging market with all of their characteristic features (Meyer and Nguyen, 2005). Second, Vietnam is ranked 112 out of 168 countries in the 2015 Global Corruption Report<sup>5</sup> (where the country with the highest corruption level is ranked at 168). Therefore, corruption is prevalent in Vietnam and informal payment can advance firms in doing business. At the same time, it is an increasingly important market in South-East Asia with a high growth rates and an increasing share in international trade. Third, Vietnam is characterised by a high share of SOEs, which have good relationships with the government, which they benefit from, and of course political connections come with both formal and informal costs for the firms (Ha and Frömmel, 2016). Last but not least, Vietnam is known as a new potential market, which brings many opportunities for foreign investors. However, the government is still putting much effort to improve business environment in order to attract more foreign investment.

Our contribution to the literature is threefold:

First, although a couple of studies have investigated the impact of corruption on the economy, the role of firm ownership identity has been neglected so far. None of the existing studies focused on the different impacts of corruption on firm growth and business environment on corruption at the firm perceived level across the different ownership identities. Nguyen and van Dijk (2012), whose

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<sup>3</sup> is defined if the government owns more than 50% of the firm's shares or voting rights.

<sup>4</sup> is defined if the foreign investors owns more than 20% of the firm's shares or voting rights.

<sup>5</sup> Vietnam scored 31 in the Corruption Perceptions Index (CPI), which ranges between 100 (highly clean) and 0 (highly corrupt). The information is available at <http://www.transparency.org/country#VNM>



study is closest to ours, analyse the effect of corruption on firm growth and governance. However, they exclusively focus on the difference between SOEs vs. non-SOEs. We extend their work and make a finer distinction by furthermore distinguishing SHEs vs. non-SHEs and FOEs vs. non-FOEs resulting in three binary variables for ownership identity, which are analysed jointly. We hope this gives a better understanding of the effects of business environment on corruption and of corruption on firm growth across different firm's ownership identities: SOE, SHE and FOE. We believe that ownership identity of firm is the main factor, which has a moderation influence on the effects of corruption on firm growth and business environment on corruption. Extending the work by Nguyen and van Dijk (2012), we strongly think that the difference in those effects between SOEs and non-SOEs is easily understood by the strong political relationship of SOEs with the government, other differences between SHEs vs. non-SHEs and FOEs vs. non-FOEs are supported by agency theory. By dividing the whole economy into different firm's ownership identities, the results as new evidence can help to fill the gap of literature for a better understanding about corruption.

Second, we analyse the impact of business environment on corruption by comparing Vietnamese provinces. These provinces show some variations in their institutional characteristics and allow us to determine the effect of business environment on corruption. Here again we rely on our finer distinction in the ownership structure.

Third, we extent the data set by Nguyen and Van Dijk (2012) and analyse data obtained from surveys conducted in 2005, 2009 and 2015, while Nguyen and Van Dijk relied on 2005 only, which results in a much higher accuracy of our estimates. The first survey is the "Enterprise Survey" conducted by the World Bank. This dataset includes firm characteristics, financial information and firms' assessments of various aspects of the local business environment. The second survey is the "Vietnam Provincial Competitiveness Index Survey" organised by the Vietnam Competitive

Initiative (VNCI) and the Vietnam Chamber of Commerce and Industry (VCCI) in the same timeframe as the World Bank surveys. This dataset comprises the information about the business environment indicators and the Province Competitiveness Index (PCI). We collected the data for firms that took part in the World Bank surveys in all conducted years, 2005, 2009 and 2015. After eliminating the firms with unavailable information, we ended up with 2,820 firm-year observations.

The chapter proceeds as follows: Section 2 reviews the literature. Section 3 introduces the empirical approach and the data while section 4 presents the results of our analysis. Section 5 of the chapter summarises and concludes the research.

## **1.2 Literature review**

### *1.2.1 Corruption*

Prior to investigating the relation between corruption and firm growth and other research questions, it is necessary to understand what corruption is. According to a definition established by the World Bank (1997) and Transparency International, corruption is the abuse of entrusted power (public power) for private gain. More specifically, the public officer uses his/her power for personal purposes to violate the order of the normal business process (Jain, 2001). Generally, there are two types of corruption: petty corruption and grand corruption (World Bank). Moreover, according to World Bank's definition, corruption consists of three main factors: offering, giving or receiving something that affects public officers in the process of purchasing or conducting contracts; frauds leading to false values; and purchasing activities that violate the principles. Corruption is considered to be a type of rent-seeking (the underwriting of the campaigns of legislators, bribery, lobbying and political violence), though there is a difference between them. For instance, bribery can be listed as

a form of lobbying but, at the same time, they can be distinguished by questioning whether or not the decisions of involved people are affected.

Corruption may affect economic performance in many ways (Jain, 2001). Firstly, corruption turns out to belong to the grease-the-wheels-of-bureaucracy kind. Secondly, corruption has an effect on bureaucratic efficiency. Thirdly, corruption can affect resources allocation. Lastly, corruption can have a relationship with the distribution of income and wealth.

According to the nature of corruption, it is understandable why corruption still exists, especially in emerging markets. The features of emerging markets give public officials considerable discretion over a wide range of economic activities and, therefore, opportunities for extorting payments (Enderwick, 2012).

### *1.2.2 Corruption and firm growth*

Since corruption has become a controversial topic, the effects of corruption on firms' growth have been added to the to-research list of many financial economists. Three main types of results have been found by those researchers: positive relationship, negative relationship or both between corruption level and firm growth.

On the one hand, corruption harms firm growth (Fisman and Svensson, 2007; Nguyen and van Dijk, 2012; Larmour, 2006; Goedhuys, Mohnen and Taha, 2016; Seker and Yang, 2014). By studying 243 Ugandan firms in the first half of 1998, Fisman and Svensson (2007) indicate that, similar to taxation, bribery has a negative effect on firms' growth (short-term) and this effect is even greater than that of taxation. More interestingly, according to a study in the context of Kenya – corruption not only dampens firms' growth but it also spoils firms' spirits to export (Larmour, 2006). Larmour also find that the exposure to corruption depends on the firm's size. Specifically, small and medium-sized firms are more exposed than very small and very large ones. In addition, in a study

about 3489 firms from Egypt (2897) and Tunisia (592), Goedhuys, Mohnen and Taha (2016) find that corruption is likely to have a significant negative relationship with firm growth. Using a model with corruption level and innovation as the two independent variables and firm growth as the dependent variable, it is found that there is a significantly negative coefficient of the corruption variable (Goedhuys, Mohnen and Taha, 2016). Far away from Africa, Seker and Yang (2014) conduct a large study of 6639 firms from 29 countries in Latin America and the Caribbean. They find that bribery remarkably damages firm growth.

Furthermore, in some cases, this unexpected effect of corruption on firm growth exists only in some types of enterprises. As described in the study of 741 private firms and 133 SOEs in Vietnam, Nguyen and van Dijk (2012) find that corruption has a negative effect on private sector growth, but not the state sector. This problem may come from the close relationship between SOEs and public officials (Nguyen and van Dijk, 2012).

On the other hand, corruption may actually improve efficiency and help growth, especially in the context of pervasive and cumbersome regulations in developing countries (Wang and You, 2012; Hasan and Pinar, 2014). With a huge data set of 12212 Chinese firms, Wang and You (2012) interestingly find that, to some extent, corruption is likely to support firm growth. More specifically, corruption has a positive correlation with the growth of firms' sales income. Meanwhile, a study of 41 manufacturing firms in Turkey indicated that there is a remarkably positive relationship between corruption level and private firms' growth (Hasan and Pinar, 2014).

Another possibility would be a double-edged sword between corruption and firms' growth (Sharma and Mitra, 2015). In their research of 2287 Indian enterprises, Sharma and Mitra use two sets of variables: macroeconomic-based and firm-based. While the former consists of factors that are related to government interaction, the latter includes firm-specific features, such as size, age,

ownership, innovation, international exposure and competitions. The results are mixed: ‘grease the wheels’ as well as ‘sand the wheels’. More specifically, bribes act as a kind of tax resulting in a decrease in efficiency, whilst bribery also supports firms in exporting and product innovation (Sharma and Mitra, 2015).

### *1.2.3 Business environment and corruption*

Apart from the relation between corruption and firm growth, this study also explores the influence of the local business environment and corruption in relation to different types of ownership. By studying this influence, we may answer the question of what really controls corruption and make suggestions for adjustments to business environment in order to minimise the likelihood of corruption and thus, to some extent, attract more investment.

Obviously, corruption usually goes along with a poor business environment, and vice versa. For instance, SMEs in the Philippines operating in cities with poorer business environment are more likely to be affected by corruption (Mendoza & Bancolita, 2013). It is supported by the study of Nguyen and van Dijk (2012) that the quality of local public governance, including regulatory entry costs, land access, and the implementation and consistency of policies, plays a crucial role in determining the level of corruption. Enhancing public governance quality may result in a decrease in corruption level, as well as reducing corruption’s effects on the economy. Furthermore, according to Dzhumashev (2014), instead of focusing on bureaucrats, the policies should target tax evaders in order to be more effective regarding both mitigating corruption and enhancing the potential growth of an economy.

#### *1.2.4 Effects of different ownership identities*

As explained at the introduction part of the chapter, three different firm's ownership identities are studied in this chapter: SOE, SHE and FOE. The effects of corruption on the growth of each type of firm listed above are different.

As far as SOEs are concerned, SOEs' managers usually have a close relationship with governmental authorities (Nguyen and van Dijk, 2012). Furthermore, in Vietnam, former executives of SOEs are often likely to climb the political ladder. Based on the above statements, SOEs' managers tend to have rent-seeking behaviour, which does not add any national value, to get better conditions for their businesses. These advantages can be large, especially in the case of the heavy bureaucracy in developing countries like Vietnam.

Turning to FOEs, investors in this type of firm usually take transparency into account when making investment decisions or adjusting the existing capital. Thus, as corruption lowers the level of transparency of business environment, foreign direct investment probably decreases. More specifically, corruption makes local bureaucracy less transparent and therefore acts as a kind of tax on foreign investors (Wei, 1997; Wei, 1998; Wei, 2000; Smarzynska and Wei, 2002). They found that an increase in corruption level (from a low percentage in Estonia to a high one in Azerbaijan) led to a drop of 15 percent in foreign investment.

As for SHEs, the existence of corruption means that the board of directors have to adapt to the situation by spending an amount of money for unclear reasons. Corruption provides less-productive firms with incentives by giving those firms contracts. This acts as a barrier for firms that aim to increase productivity and maximizing their value (David et al., 2016). According to Jensen and Meckling (1976), there is a difference in the interests of bondholders (preferring stability and safe investments) and shareholders (preferring higher returns with higher risk), and this results in a

conflict between risk-seeking shareholders and corrupt managers. Finally, all those things result in an increase in agency cost, and firm growth might be affected negatively.

Table 1.1 clearly summarizes previous research on the relationship between corruption and firm growth as well as the effects of the local business environment on corruption in different markets.

[Insert Table 1.1 here]

## 1.3 Methodology

### 1.3.1 Corruption and firm growth

To examine the impact of corruption on the firm growth, we used the equation (1) as follow:

$$\text{GROWTH}_{it} = \beta_0 + \beta_1 \text{CORRUPTION} + \beta_2 \text{CONTROLS}_{it} + e_{it}$$

Firm growth (GROWTH) is determined by using the ratio of sales growth. We use firm characteristics including firm age (AGE), firm size (SIZE), innovation (INNO) and female ownership (FO) as the control variables. We expect that firm age (AGE) has a negative impact on growth, since growth tends to slow down as firms mature (Nguyen & Van Dijk, 2012). AGE is measured as the total number of years from the establishment (Isidro & Sobral, 2014; Kabir & Thai, 2017). SIZE is the natural logarithm of total sales (Nguyen & Van Dijk, 2012). The effect of firm size (SIZE) is ambiguous: smaller firms tend to have more opportunities for growth (Konijn et al., 2011), but bigger firms have a more capacity to speed up growth. Innovation (INNO) is known as one of the driving forces for growth (Nguyen & Van Dijk); INNO is a binary variable, and equals

one if the firm introduced new or significantly improved products or services and zero otherwise. The owner's gender affects the level of the firm's risk: it is smaller if the owner is female (FO) compared with a male owner, in which matter in terms of firm performance and growth (Khan & Vieito, 2013). FO equals one if at least one of the firm's owners is female and zero otherwise. CORRUPTION is measure by two proxies: (1) IPDUM is a binary variable; it equals one if the firm thinks that establishments (not necessary the firm itself) are required to make gifts or informal payments to public officials to "get things done" with regard to customs, taxes, licenses, regulations, services etc. and zero otherwise; (2) IPAMOUNT is the ratio of informal payments that the establishments (not necessary the firm itself) pays (estimated by the firm) over the annual sales.

We use State-owned enterprise (SOE), foreign-owned enterprise (FOE) and shareholding enterprise (SHE) as different binary variables to determine the difference in the impact of corruption on firm growth in different types of ownership. In each variable, the value equals one if the firm is a SOE/SHE/FOE and zero otherwise.

### *1.3.2 Business environment and corruption*

To further explore the influence of the local business environment and corruption in different types of ownership; the equation (2) of the study is as follow:

$$\text{CORRUPTION}_{it} = \beta_0 + \beta_1 \text{PCI}_{it} + \beta_2 \text{CONTROLS}_{it} + e_{it}$$

We use the provincial competitiveness index (PCI) provided by VNCI and VCCI as the determinants of corruption. The overall PCI includes ten sub-indices, reflecting economic governance areas that affect private sector development. A province with better PCI is the one with: 1) low entry costs for business start-up; 2) easy access to land and security of business premises; 3)



a transparent business environment and equitable business information; 4) minimal informal charges; 5) has limited time requirements for bureaucratic procedures and inspections; 6) limit crowding out of private activity from policy biases toward state, foreign, or connected firms; 7) proactive and creative provincial leadership in solving problems for enterprises; 8) developed and high-quality business support services; 9) sound labor training policies; and 10) fair and effective legal procedures for dispute resolution<sup>6</sup>.

We continue to use firms' characteristics including AGE, SIZE, INNO and FO as the control variables since we think that those variables have an impact on corruption at the firm-perceived level. We expect that AGE and SIZE have positive effects on corruption as in a high corrupt country like Vietnam, mature and bigger firms are likely to have more experience on dealing with the local government to get benefits. We expect that the effect of innovation on corruption is mixed. On the one hand, technological innovation (INNO) helps firms to depend less on the goodwill from public authorities. However, on the other hand, firms may need to work more with public authorities for the permits, licenses or land access if they apply for new technologies; therefore, they are more likely willing to pay for avoiding complex bureaucracy. We also consider the owners' gender as a control variable with mixed effects. On the one hand, female owners are more sensitive than male ones to the perception of corruption especially in highly corrupt countries. However, on the other hand, firms with female owners (FO) are likely to have a lower risk level but a more flexible management style than the ones with exclusively male owners. Besides that, female owners are less likely to engage in corruption because this may raise the costs of doing business (Xia et al., 2018); hence, firms with female owners can show a lower level of corruption.

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<sup>6</sup> Available at <http://eng.pcivietnam.org/about/about-pci/>

## 1.4 Variable measurement and data

### 1.4.1 Variable measurement

Our choice of variables is based on the literature and the data surveys by the World Bank, VNCI and VCCI. We use sales growth to measure firm growth (GROWTH). Corruption is measured by two proxies including Informal Payment Dummy (IPDUM) and Informal Payment Amount (IPAMOUNT). IPDUM is a binary variable, which equals 1 if the firm perceives that there are informal payments to public officials in the industry, and 0 otherwise. The value is based on the perception of firm that sometimes establishments (not necessary the firm itself) are required to make gifts or informal payments to public officials to “get things done” with regard to customs, taxes, licenses, regulations, services etc.; And IPAMOUNT is the ratio of informal payments that the firm pays (estimated by the firm) over the firm sales.

For the determinant of the local business environment, we used data obtained by the VNCI and VCCI survey, namely the Vietnam Provincial Competitiveness Index Survey. Provincial Competitiveness Index (PCI) is used to measure for local business environment. PCI on Vietnam’s business environment conducts an annual business survey, assessment and ranking of the economic governance quality of provincial authorities in creating a favorable business environment for development of the private sector<sup>7</sup>.

Our control variables include AGE, SIZE, INNO and FO. AGE is firm age in years; SIZE is measured as the natural logarithm of total sales; INNO is a binary variable, which equals one if the firm introduced new or significantly improved products or services and zero otherwise; FO is a binary variable, equals one if at least one of the firm’s owners is female and zero otherwise.

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<sup>7</sup> See more at <http://eng.pcivietnam.org/about/about-pci/>

For the variables of different firm's ownership identities: SOE, SHE and FOE, for each variable, the value equals one if the firm is a SOE/SHE/FOE, and zero otherwise.

The definitions of the variables are shown in Table 2.

[Insert Table 1.2 here]

When investigating the influences of corruption on firm growth and the local business environment on corruption, we shall address the problems of endogeneity. Previously, Svensson (2003) or Fisman and Svensson (2007) measure corruption at firm level as the bribery payments made by individual firms themselves. Hence, corruption may have an endogenous relation with firm growth, as growth affects a firm's ability to pay informal charges (Svensson, 2003). In addition, corruption may affect firm's investments since manager would be able to save money for corruption rather than for investment. This would result in a reduction of firm growth. However, in this chapter, these problems do not play important roles due to the specific measurement of corruption. It is measured based on the perception of firms regarding whether they need to make informal payments and the judgment about how corrupt the local business and industrial environments are, rather than the actual level of corruption that firms face. In this situation, industry and province dummies capture such endogenous effects of growth on our used measures of corruption (Nguyen & van Dijk, 2012).

#### *1.4.2 Data*

We use data collected from the surveys conducted in 2005, 2009 and 2015. The first survey is the "Productivity and Investment Climate Enterprise Survey" conducted by the World Bank. This dataset includes firm characteristics, gender participation, access to finance, annual sales, costs of factors/labor, workforce composition, bribery, licensing, infrastructure, trade, crime, competition, capacity utilization, land and permits, taxation, informality, business-government relations,

innovation and technology, and performance measures. More than 90% of the questions objectively ascertain characteristics of business environment in Vietnam. The survey focuses on all sectors according to the group classification of International Standard Industrial Classification (ISIC) Revision 3.1: manufacturing (group D), construction sector (group F), services sector (groups G and H), and transport, storage, and communications sector (group I). The second survey is the “Vietnam Provincial Competitiveness Index Survey” conducted by the VNCI and the VCCI in 2005, 2009 and 2015. This dataset comprises province-level indicators of the quality of the business environment.

We start with a panel of 3,199 firm-year observations including 1,150 observations in 2005, 1,053 observations in 2009 and 996 observations in 2015. After removing the firms without information on total sales, the sample size of our study is 2,820 firm-year observations of 2,285 firms, which include 2,052 observations in 2005, 867 observations in 2009 and 996 observations in 2015. Those firms are located in 24 different provinces, namely An Giang, Bac Ninh, Ba Ria – Vung Tau, Binh Dinh, Binh Duong, Can Tho, Da Nang, Dong Nai, Hai Duong, Hai Phong, Ha Noi, Ha Tinh, Ho Chi Minh City, Thua Thien Hue, Khanh Hoa, Kien Giang, Long An, Nam Dinh, Nghe An, Quang Nam, Quang Ngai, Thanh Hoa and Tien Giang. The indicators of the local business environment are shown by province and year in panel A of table 3. We also display the observations by provinces and years in panel B. Panel C shows information on the unbalanced observations over years, while panel D of the table presents the sample by ownership identities and years. In total, the sample includes 843 SHEs, 278 SOEs and 346 FOEs. Panel E provides information on corruption in SOEs, SHEs and FOEs over the years. In 2005, there are 150 corrupt SOEs over a total of 232 SOEs, which accounts for 64.66%. These percentages are 47.43% and 38.51% in SHEs and FOEs respectively. In 2009, 57.58% of SOEs are corrupt while this percentage is 27.3% for SHEs and

34.48 for FOEs. In 2015, 46.15% of SOEs are corrupt while these percentages are 37.76% and 43.90% for SHEs and FOEs respectively.

[Insert Table 1.3 here]

#### *1.4.3 Descriptive statistics*

Table 1.4 presents the descriptive statistics and correlation coefficients of the variables employed in the analysis. The corruption level in Vietnam is high as 37% of the firms think that they have to pay informal charges when they run their business. Besides that, the surveyed firms think that the firms operating within their location or industry on average pay 3% out of their total sales to corrupt public officials. For business environment, there is a large range of PCI in the 13 provinces, with the highest and lowest indexes of 38.81 and 76.82, respectively. In detail, table 1.4 shows the variable descriptive statistics.

[Insert Table 1.4 here]

Table 1.5 presents the ownership types by year. Panel D details correlation coefficients of the variables. All correlation coefficients between independent variables are lower than 0.3, so the possibility of serious multi-collinearity can be excluded (Xia et al., 2014; Sun et al., 2016; Deng et al., 2018). IPDUM and IPAMOUNT are negatively related to firm growth (GROWTH). Besides that, PCI is negatively correlated with IPDUM and IPAMOUNT.

[Insert Table 1.5 here]

## 1.5. Data analysis results

### 1.5.1 Corruption and firm growth

Table 1.6 shows the regression results for equation (1) with three panels for three different ownership identities: Panel A for SOE, panel B for SHE and panel C for FOE. We use sale growth to represent firm growth (GROWTH) as the dependent variable; CORRUPTION as the independent variable; firm age (AGE), firm size (SIZE), innovation (INNO) and female ownership (FO) as control variables; we include year, industry and province dummies to control for the effects of those variables in the model. Corruption is measured by two proxies: An informal payment dummy (IPDUM), which equals one if the firm believes that firms need to make informal payments to get “things done” and zero otherwise; and the informal payment amount (IPAMOUNT) for the ratio of the estimation of informal payment amount the firm needs to make over the total sales.

As the data contains a panel dimension, problems can occur with regard to cross-sectional characteristics as heteroscedasticity or time-series characteristics as autocorrelation and omitted variables. With those problems, the fixed effects model and the random effects model are the most commonly used approaches (Kabir & Thai, 2017). We use the Breusch-Pagan test to choose between OLS and the random effects model; the Hausman test is used to decide whether the fixed or the random effects model is used; and the result of the F test shows whether the fixed effects model or OLS is more suitable. The results from those tests show that the fixed effects model is the most appropriate one for the full sample with interaction terms and OLS is chosen in cases of sub-samples.

In panel A of table 1.6, the regression results from the fixed effects model for the full sample show that the coefficients of IPDUM and IPAMOUNT are all significantly negative; however, the coefficients on the interaction terms between SOE and corruption (IPDUM and IPAMOUNT) are significantly positive. Those results indicate that while corruption has a negative effect on firm

growth, it positive affects the growth of SOEs. We also estimate the regression for the sub-sample of non-SOEs to show clearly the effect of corruption on firm growth of private firms and find a significantly negative effect of corruption (IPDUM and IPAMOUNT) on the growth of non-SOEs. Generally, we find that corruption adversely affects the growth of private firms, while it does not hamper SOEs' growth. Among the control variables, in the regression results for fixed effects model with full sample, the coefficients of SIZE and INNO are positively significant and the coefficients on the interaction term between SOE and FO are negatively significant. In case of sub-sample of non-SOEs, the coefficients of SIZE and INNO are positively significant while the coefficients of AGE are negatively significant. The positive coefficients of INNO is consistent with the explanation that technological innovation help non-SOEs to improve the growth. Besides, the positive coefficients of SIZE mean that larger sized private enterprises may have better firm growth than smaller sized ones. The negative coefficients of AGE tell that younger non-SOEs have higher firm growth than older ones. The negative coefficients on the interaction term between SOE and FO show that SOEs with female manager may have lower firm growth than those with male manager.

Panel B of table 1.6 presents the regression results for SHE. The results from the fixed effects model for the full sample indicate that the coefficients of IPDUM and IPAMOUNT are insignificant but they turn to be significantly negative for both interaction terms between the two proxies for corruption (IPDUM and IPAMOUNT) and SHE. Again, we continue to estimate the regression for sub-sample of non-SHEs and find significantly positive coefficients in both cases of IPDUM and IPAMOUNT. The results clearly show that while corruption is negatively link with firm growth (GROWTH) of SHEs, it does not lower non-SHEs' growth. Among the control variables, in the regression results for fixed effects model with full sample, the coefficients of SIZE and INNO are positively significant. In case of sub-sample of non-SHEs, the coefficients of SIZE and INNO are

positively significant while the coefficients of AGE are negatively significant. The positive coefficients of INNO is consistent with the explanation that technological innovation help non-SHEs to improve the growth. Besides, the positive coefficients of SIZE mean that larger sized non-SHEs may have better firm growth than smaller sized ones. The negative coefficients of AGE tell that younger non-SOEs have higher firm growth than older ones.

The regression results from Panel C indicate that corruption has a negative effect on the growth of FOEs and non-FOEs. The coefficients of IPDUM and IPAMOUNT are significantly negative both for the full sample and the sub-sample of non-FOEs. The coefficients on the interaction terms between IPDUM, IPAMOUNT and FOE are also significantly negative. In sum, corruption harm the economic growth, especially the growth of FOEs. Among the control variables, in the regression results for fixed effects model with full sample, the coefficients of SIZE and INNO are positively significant. In case of sub-sample of non-FOEs, the coefficients of SIZE and INNO are positively significant while the coefficients of AGE are negatively significant. The positive coefficients of INNO is consistent with the explanation that technological innovation may help to improve the growth of non-FOEs. Besides, the positive coefficients of SIZE mean that larger sized non-FOEs may have better firm growth than smaller sized ones. The negative coefficients of AGE tell that younger non-FOEs have higher firm growth than older non-FOEs.

[Insert Table 1.6 here]

### *1.5.2 Business environment and corruption*

Table 1.7 presents regression results for equation (2). This table shows the impact of PCI as the measure of local business environment on whether the firm makes informal payments or not in



the spirit of our hypothesis that PCI is the determinant of corruption. We continue to use AGE, SIZE, INNO and FO as control variables. The table comprises three panels for three ownership identities including panel A for SOE, panel B for SHE and panel C for FOE.

In panel A of table 1.7, the regression results for full sample show that the coefficients of PCI are significantly negative while the coefficients on the interaction term between PCI and SOE are significantly positive. We continue to estimate the regression by using the sub-sample of non-SOEs only. The coefficients of PCI are significantly negative. These coefficients indicate that the quality of the business environment (PCI) has a negative effect on corruption in non-SOEs but positive effect on corruption in SOEs. It is consistent with the explanation that when provinces provide better business environment, SOEs may be more willing to make informal payments to get benefit from public officials; however, non-SOEs are likely to avoid making informal payments in the competition with SOEs. Among the control variables, the coefficients of INNO are significantly positive for both the full sample and the sub-sample of non-SOEs. These positive coefficients indicate that non-SOEs with technological innovation may be more willing to make informal payments in comparison with those without innovation.

The panel B of table 1.7 displays the regression results for SHE. Again, the results are shown for both the full sample and sub-sample of non SHEs. In case of the full sample, the coefficients of PCI are insignificant while the coefficients on the interaction term between PCI and SHE are significantly negative in both cases of IPDUM and IPAMOUNT. For the sub-sample of non-SHEs, the coefficients of PCI are not significant. The negative coefficients on the interaction term between PCI and SHE indicate that SHEs are likely to avoid of making informal payments if the provinces provide better business environment. The results also show that while the coefficients of AGE, SIZE and INNO are significantly positive for both the full sample and the sub-sample of non-SHEs, the

coefficients on the interaction terms between SIZE, INNO and SHE are significantly negative, and the coefficients on the interaction term between FO and SHE are significantly positive. These significant coefficients indicate that firm age (AGE), firm size (SIZE) and innovation (INNO) have positive effects on corruption in non-SHEs; firm size (SIZE) and innovation (INNO) have negative effects on corruption in SHEs. Besides, the positive coefficients on the interaction term between FO and SHE mean that SHEs with female owners (FO) may be more willing to make informal payments in comparison with SHEs with male owners.

The results from panel C present that the coefficients of PCI are all insignificant in both cases of full sample and sub-sample of non-FOEs while the coefficients on the interaction term between PCI and FOE are significantly negative. Those coefficients indicate that PCI does not have any effect on corruption in non-FOEs but it has a negative effect on corruption in FOEs. It is consistent that FOEs are more likely to avoid of making informal payments if the provinces provide better business environment. Among control variables, the coefficients of AGE and INNO are significantly positive, the coefficients on the interaction terms between SIZE, INNO and FOE are significantly negative and the coefficients on the interaction term between FO and FOE are significantly positive. These coefficients provide that in non-FOEs, firm size (SIZE) and innovation (INNO) have positive effects on corruption while in FOEs, firm size (SIZE) and innovation (INNO) have negative effects, FO has a positive effect on corruption.

It cannot be generally concluded that with the better business environment, the firms do not need to make informal payments since the results are heterogeneous among different types of firm's ownership identity. In sum, SOEs may need to pay more for informal cost if they are located at the province with better PCI. However, the results are different with SHEs and FOEs. PCI in those firms has a negative effect on corruption (both IPDUM and IPAMOUNT). It reveals that higher PCI as

better business environment at provincial level can help those firms to avoid making informal payments. A higher point of PCI is an indicator for a better business environment, better local government with less bureaucracy, therefore, SHEs and FOEs do not need to make informal payments when they work with the local government. In contrast, it can be different with SOEs. Vietnamese SOEs receive many preferential treatments from the government. Hence, in any case, SOEs are always willing to pay for the benefits they get or even for maintaining the connections with politicians. However, in provinces with better PCI, it seems more difficult for SOEs to get close connections with the government in order to get the unfair-benefits; and therefore, they may need to pay even more.

[Insert Table 1.7 here]

## **1.6 Conclusions**

Based on theories such as agency theory and rent-seeking behaviour, along with previous literature about the relation between corruption and firm growth, this study has developed an empirical framework to analyse the effects of corruption on firm growth in Vietnam. The chapter adds to the corporate finance field by analysing previous empirical studies and determining the best explanatory variables. As a result, two regression equations have been built. The first equation comprises firm growth as dependent variable, corruption as independent variable, firm age (AGE), firm size (SIZE), innovation (INNO) and female owner (FO) as control variables. The second equation consists of corruption as dependent variable, PCI for local business environment as independent variable, and firm age (AGE), firm size (SIZE), innovation (INNO) and female owner (FO) as control variables. Furthermore, by reviewing theories (agency theory and rent-seeking

behaviour) and applying these equations to real data, this study has attempted to minimise the gap between theory and practice.

The results of the regression models have pointed out the following relationships between corruption and firm growth. While corruption affects negatively firm growth in non-SOEs, SHEs and FOEs, it positively influences the firm growth of SOEs. Corruption, or so-called bribery, has a significant negative relationship with firm growth in shareholding and FOEs. This result supports the agency theory as bribery money may lead to information asymmetry and, therefore, an increase in agency cost along with the decrease in firm growth. Conversely, corruption has a statistically significant positive relationship with the growth of SOEs, which is consistent with the fact that a good relationship with government provides SOEs with advantages. While SOEs in Vietnam are known as the ones who have very strong relationships with Vietnamese Government; managers of SOEs are also known as politicians, and therefore, SOEs can benefit from their connections and of course, they have to pay for that.

Turning to the effect of the local business environment on corruption, the associations differ between different types of firm's ownership identity. While PCI has a negative effect on corruption in SHEs and FOEs, there is a positive effect in SOEs. It means that SHEs and FOEs located at provinces with higher PCI, as the overall indicator to measure the quality of business environment can have less probability of making informal payments than those in provinces with lower PCI. In contrast, it gets more difficult for SOEs to make informal payments in those provinces with higher PCI, therefore they are willing to pay more or need to pay more to get the preferential treatments from the local government.

The results of this study can be the reference for Vietnamese Government in their business environment improvement process when it gives a broader view of the effect of corruption to the

whole economy by dividing into different firm's ownership identities. When the number of SOEs is decreasing dramatically, the role of non-SOEs (private-owned enterprises), especially SHEs should be recognized as the most important economic sectors. Besides, in order to be an attractive economy, Vietnam should try to be more transparent and fairer to welcome more foreign investors come to do business. Generally, this study brings a broad view and provide policymakers with information and references on which to base rules or laws related to corruption. Practically, reforms in reducing time consuming and wasteful administrative procedures can improve the quality of business environment, which helps to reduce corruption. We do believe that if the problem of corruption is solved, Vietnam not only attract more foreign investors but also create a better business environment for the economic development.

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## TABLES

Table 1.1 Summary of previous research results

Author	Year	Data set	Findings
Nguyen and van Dijk	2012	741 private firms and 133 SOEs	They found that corruption hampers the growth of Vietnam's private sector, but is not detrimental for growth in the state sector. Corruption may harm economic growth because it favours the state sector at the expense of the private sector; improving the quality of local public governance can help to mitigate corruption and stimulate economic growth
Fisman and Svensson	2007	243 Ugandan firms	They found that both the rate of taxation and bribery are negatively correlated with firm growth. A one-percentage point increase in the bribery rate is associated with a reduction in firm growth of three percentage points, an effect that is about three times greater than that of taxation.
Wang and You	2012	12212 Chinese firms	Corruption is likely to contribute to firms' growth.
Larmour	2006	279 Kenyan firms	Corruption significantly dampens firm growth and the propensity to export.
Hasan and Pinar	2014	41 manufacturing firms in Turkey	They specifically found a significantly positive relation between the growth of private firms and corruption level.
Goedhuys, Mohnen and Taha	2016	3489 firms from Egypt (2897) and Tunisia (592).	Corruption seems to have a direct negative effect on growth, as indicated by the negative and significant coefficient of the corruption variable.
Seker and Yang	2014	6639 firms from 29 countries in Latin America and Caribbean	Bribery significantly distorts firm growth.

Table 1.1 (cont'd)

Author	Year	Data set	Findings
Sharma and Mitra	2015	2287 Indian enterprises	The findings on the effects of bribery on firms' performance are rather mixed. They note that bribery works as a tax on the profitability of firms and reduces efficiency. However, the evidence is inconclusive relating to productivity. On the other hand, bribing has a positive effect on the firms' exports and product innovation.
Mendoza and Bancolita	2013	1700 SMEs in 29 Philippine Cities	More corruption is reported by firms located in cities with very poor business environment and weak provision of public goods.
Dzhumashev	2014		The policies reducing tax evasion mitigate corruption and enhance growth.

Table 1.2 Variable definitions

Panel A. The World Bank's "Productivity and investment climate enterprise survey"

Variable	Definition
Firm age	Firm age in years.
Firm size	Natural logarithm of total sales (in million VND).
Innovation	A binary variable, equals one if the firm introduced new or significantly improved products or services and zero otherwise.
Female owner (FO)	A binary variable, equals one if at least one of the firm's owners is female and zero otherwise.
Informal Payment dummy (IP dummy)	A binary variable, which equals 1 if the firm perceives that there are informal payments to public officials in the industry, and 0 otherwise. The value is based on the perception of firm that sometimes establishments (not necessary the firm itself) are required to make gifts or informal payments to public officials to "get things done" with regard to customs, taxes, licenses, regulations, services etc.
Informal Payment Amount (IP Amount)	The ratio of informal payments that the establishments (not necessary the firm itself) pays (estimated by the firm) over the annual sales.
SOE	A binary variable for firm ownership identity, which equals 1 if the government owns more than 50% of the firm's shares or voting rights and 0 otherwise.
SHE	A binary variable for firm ownership identity, which equals 1 if the firm is shareholding firm and 0 otherwise. Shareholding enterprises are defined as shareholding companies with shares trade in the stock market, non-traded shares or shares traded privately.
FOE	A binary variable for firm ownership identity, which equals 1 if the firm has foreign investors who hold at least 20% of the firm's shares or voting rights and 0 otherwise.

Panel A (cont'd)

Variable	Definition
Firm growth	Sales growth rate. Measured by the change in total sales between the beginning of the surveyed year and the beginning of the last year from the surveyed year.

Panel B. VNCI and VCCI's "Vietnam provincial competitiveness index survey"

Variable	Definition
PCI	Provincial Competitiveness Index.

Table 1.3 Sample description

Panel A. PCI by provinces and years

Province	2005	2009	2015
Cantho	61.29	62.17	59.81
Danang	70.67	75.96	68.34
Hanoi	60.32	58.18	59.00
Haiphong	59.40	57.57	58.65
Hochiminh City	59.61	63.22	61.36
Bacninh	58.06	65.70	59.91
Hatay	38.81	n/a	n/a
Haiduong	45.79	58.96	58.37
Namdinh	45.97	52.60	59.62
Binh딘	60.60	65.97	59.23
Hatinh	51.67	55.26	57.20
Khanhhoa	54.08	58.66	58.69
Nghean	59.56	52.56	58.47
Quangnam	59.72	61.08	61.06
Quangngai	47.99	52.34	59.70
Thanhhoa	49.29	57.32	60.74
Thuathienhue	56.77	64.23	58.52
Binhduong	76.82	74.01	58.89
Baria-Vungtau	59.15	65.96	59.51
Dongnai	64.14	63.16	57.79
Longan	58.49	64.44	60.86

Panel A (cont'd)

Province	2005	2009	2015
Angiang	50.90	62.47	57.61
Dongthap	58.65	68.54	66.39
Tiengiang	55.89	65.81	56.74

Panel B. Observations by years and provinces

Province	2005	2009	2015
Can Tho	35	33	31
Da Nang	46	40	41
Ha Noi	128	148	139
Hai Phong	73	67	61
Ho Chi Minh City	227	166	186
Bac Ninh	18	7	18
Ha Tay	43	n/a	n/a
Hai Duong	14	16	13
Nam Dinh	31	20	36
Binh Dinh	34	27	24
Ha Tinh	22	15	25
Khanh Hoa	36	33	29
Nghe An	34	36	32
Quang Nam	16	10	13
Quang Ngai	8	5	7
Thanh Hoa	60	54	52
Thua Thien Hue	19	11	18
Binh Duong	72	62	53
Ba ria – Vung Tau	13	6	12
Dong Nai	56	54	54
Long An	33	30	24
An Giang	14	6	13
Dong Thap	7	4	7
Tien Giang	13	17	13
Total	1052	867	901



Panel C. Unbalanced observations over years

Number of firm	2005	2009	2015
741	x		
436		x	
666			x
207	x	x	
131		x	x
11	x		x
93	x	x	x

Panel D. Ownership identities by years

Year	SHEs	Non-SHEs	Total	SOEs	Non-SOEs	Total	FOEs	Non-FOEs	Total
2005	409	643	1,052	232	820	1,052	148	904	1,052
2009	238	629	867	33	834	867	116	751	867
2015	196	705	901	13	888	901	82	819	901
Total	843	1,977	2,820	278	2,542	2,820	346	2,474	2,820

Panel E. Percentage of corrupt firms over years and ownership identities

	2005	2009	2015
SOE	64.66%	57.58%	46.15%
SHE	47.43%	27.3%	37.76%
FOE	38.51%	34.48%	43.90%

Table 1.4 Descriptive statistics

Variable	Mean	Std. Deviation	Min	Max
GROWTH	0.30	0.52	-0.51	1.4
AGE	12.50	9.80	2.000	39
SIZE	59,049.15	98,336.31	600	37,5546.5
INNO	0.18	0.35	0.000	1.000
FO	0.15	0.36	0.000	1.000
IPDUM	0.37	0.48	0.000	1.000
IPAMOUNT	0.03	0.04	0.000	0.14
PCI	60.31	5.26	49.29	74.01
SOE	0.10	0.30	0	1
SHE	0.30	0.46	0	1
FOE	0.12	0.32	0	1

For variable definitions: see Table 1.2.

All variables are winsorized at the 5% level.

Table 1.5 Correlation coefficients

	Variable	1	2	3	4	5	6	7	8	9	10	11
1	GROWTH	1										
2	IPDUM	-0.09 ***	1									
3	IPAMOUNT	-0.06 **	0.73 ***	1								
4	AGE	0.04 *	0.06 ***	0.06 ***	1							
5	SIZE	0.12 ***	0.02	0.01	0.28 ***	1						
6	INNO	0.19 ***	-0.01	0.00	-0.01	0.04 **	1					
7	FO	-0.11 ***	-0.12 ***	-0.08 ***	0.06 ***	0.04 **	0.23 ***	1				
8	SOE	0.03	0.18 ***	0.15 ***	0.36 ***	0.22 ***	-0.10 ***	-0.12 ***	1			
9	SHE	0.06 ***	0.03	0.01	-0.02	0.11 ***	-0.01	0.00	-0.13 ***	1		
10	FOE	0.05 ***	0.01	-0.02	-0.14 ***	0.12 ***	0.05 **	-0.10 **	-0.11 ***	0.21 ***	1	
11	PCI	0.04*	-0.07 ***	-0.06 ***	-0.06 ***	0.05 ***	0.01	-0.04	-0.04 *	0.01	0.08 ***	1

For variable definitions: see Table 1.2.

\*, \*\*, \*\*\* for statistical significance at 10%, 5% and 1% level respectively.

All variables are winsorized at the 5% level.

Table 1.6 Estimation results: Corruption and firm growth

## Panel A. SOE

Model #	(1)		(2)		(3)		(4)	
	FEM		FEM		OLS		OLS	
Sample	All firms		All firms		Non-SOEs		Non-SOEs	
D. V.	Firm Growth		Firm Growth		Firm Growth		Firm Growth	
	Coef.	p-value	Coef.	p-value	Coef.	p-value	Coef.	p-value
IPDUM	-0.2626***	0.000			-0.2070***	0.000		
IPAMOUNT			-2.1061***	0.000			-1.6159***	0.000
AGE	-0.0239	0.160	-0.0197	0.258	-0.0037***	0.001	-0.0039***	0.000
SIZE	0.0870***	0.000	0.0929***	0.000	0.0408***	0.000	0.0406***	0.000
INNO	0.5164***	0.000	0.4968***	0.000	0.4658***	0.000	0.4572***	0.000
FO	-0.0987	0.166	-0.0842	0.247	0.0377	0.276	0.0426	0.217
SOE	-0.9974*	0.090	-0.9552	0.109				
SOE*IPDUM	0.4255***	0.001						
SOE*IPAMOUNT			2.5614*	0.065				
SOE*AGE	0.0013	0.837	-0.0004	0.945				
SOE*SIZE	0.0709	0.205	0.0819	0.142				
SOE*INNO	0.1983	0.308	0.1991	0.337				
SOE*FO	-0.5464*	0.079	-0.5427*	0.088				

Panel A (cont'd)

Year controls	Yes	Yes	Yes	Yes
Industry controls	No	No	Yes	Yes
Province controls	No	No	Yes	Yes
F	19.06***	16.55***	18.39***	15.91***
Prob>F	0.000	0.000	0.000	0.000
R Square	0.3219	0.2918	0.1882	0.1714
Observation	2820	2820	2542	2542

For variable definitions: see Table 1.2.

\*, \*\*, \*\*\* for statistical significance at 10%, 5% and 1% level respectively.

All variables are winsorized at the 5% level.

Panel B. SHE

Model #	(5)		(6)		(7)		(8)	
	FEM		FEM		OLS		OLS	
Sample	All firms		All firms		Non-SHEs		Non-SHEs	
D. V.	Firm Growth		Firm Growth		Firm Growth		Firm Growth	
	Coef.	p-value	Coef.	p-value	Coef.	p-value	Coef.	p-value
IPDUM	-0.0082	0.864			0.0912***	0.000		
IPAMOUNT			-0.4629	0.392			0.7382**	0.013
AGE	-0.0282*	0.097	-0.0194	0.273	-0.0044***	0.000	-0.0045***	0.000
SIZE	0.0869***	0.000	0.0941***	0.000	0.0364***	0.000	0.0375***	0.000
INNO	0.4641***	0.000	0.4946***	0.000	0.3888***	0.000	0.3964***	0.000
FO	-0.1245	0.109	-0.1065	0.188	0.0491	0.204	0.0457	0.238
SHE	0.3158	0.159	-0.0157	0.945				
SHE*IPDUM	-0.5494***	0.000						
SHE*IPAMOUNT			-3.8083***	0.000				
SHE*AGE	-0.0008	0.809	-0.0006	0.876				
SHE*SIZE	-0.0067	0.755	0.0136	0.541				
SHE*INNO	-0.0476	0.637	-0.0266	0.800				
SHE*FO	-0.0005	0.996	-0.0481	0.673				
Year controls	Yes		Yes		Yes		Yes	
Industry controls	No		No		Yes		Yes	
Province controls	No		No		Yes		Yes	
F	22.30***		17.19***		10.05***		9.83***	
Prob>F	0.000		0.000		0.000		0.000	



Panel B (cont'd)

R Square	0.357	0.2997	0.1478	0.1449
Observation	2820	2820	1977	1977

For variable definitions: see Table 1.2.

\*, \*\*, \*\*\* for statistical significance at 10%, 5% and 1% level respectively.

All variables are winsorized at the 5% level.

Panel C. FOE

Model #	(9)		(10)		(11)		(12)	
	FEM		FEM		OLS		OLS	
Sample	All firms		All firms		Non-FOEs		Non-FOEs	
D. V.	Firm Growth		Firm Growth		Firm Growth		Firm Growth	
	Coef.	p-value	Coef.	p-value	Coef.	p-value	Coef.	p-value
IPDUM	-0.1227***	0.002			-0.0482**	0.025		
IPAMOUNT			-0.9141**	0.049			-0.3742	0.129
AGE	-0.0193	0.217	-0.0183	0.253	-0.0037***	0.000	-0.0037***	0.000
SIZE	0.0942***	0.000	0.0949***	0.000	0.0413***	0.000	0.0409***	0.000
INNO	0.4549***	0.000	0.4539***	0.000	0.3928***	0.000	0.3890***	0.000
FO	-0.0721	0.307	-0.0467	0.519	0.0498	0.147	0.0505	0.142
FOE	0.6628	0.101	-0.0057	0.988				
FOE*IPDUM	-0.7052***	0.000						
FOE*IPAMOUNT			-5.8592***	0.000				
FOE*AGE	-0.001	0.901	-0.0038	0.630				
FOE*SIZE	-0.0368	0.389	0.0274**	0.027				
FOE*INNO	0.1669	0.270	0.1519	0.330				
FOE*FO	-0.2564	0.529	-1.0400**	0.010				
Year controls	Yes		Yes		Yes		Yes	
Industry controls	No		No		Yes		Yes	
Province controls	No		No		Yes		Yes	
F	21.37***		18.60***		11.27***		11.15***	

Panel C (cont'd)

Prob>F	0.000	0.000	0.000	0.000
R Square	0.3474	0.3166	0.134	0.133
Observation	2820	2820	2474	2474

For variable definitions: see Table 1.2.

\*, \*\*, \*\*\* for statistical significance at 10%, 5% and 1% level respectively.

All variables are winsorized at the 5% level.

Table 1.7 Estimation results: Business environment and corruption

## Panel A. SOE

Model #	(1)		(2)		(3)		(4)	
D. V.	IP Dummy		IP Amount		IP Dummy		IP Amount	
Sample	All firms		All firms		Non-SOEs		Non-SOEs	
	Coef.	p-value	Coef.	p-value	Coef.	p-value	Coef.	p-value
PCI	-0.0358***	0.000	-0.0005***	0.001	-0.0359***	0.000	-0.0005***	0.001
AGE	0.0096*	0.056	0.0002	0.112	0.0095*	0.059	0.0002	0.114
SIZE	-0.0193	0.441	-0.0006	0.212	-0.0196	0.433	-0.0006	0.211
INNO	0.4778***	0.000	0.0065***	0.007	0.4730***	0.000	0.0066***	0.006
FO	-0.1723	0.265	-0.0013	0.623	-0.178	0.250	-0.0011	0.669
SOE	-10.6668***	0.000	-0.1262***	0.000				
SOE*PCI	0.1723***	0.000	0.0022***	0.000				
SOE*AGE	-0.0183	0.141	-0.0002	0.508				
SOE*SIZE	0.136	0.141	0.0012	0.562				
SOE*INNO	0.5056	0.398	0.0298**	0.048				
SOE*FO	-0.5335	0.550	-0.0078	0.646				
Year controls	Yes		Yes		Yes		Yes	
Industry controls	Yes		Yes		Yes		Yes	
Province controls	Yes		Yes		Yes		Yes	
Wald Chi2/F	269.07***		11.52***		147.86***		11.09***	
Prob>Chi2/Prob>F	0.000		0.000		0.000		0.000	

Panel A (cont'd)

Pseudo R Squared/R Squared	0.077	0.0647	0.0496	0.0393
Observation	2820	2820	2542	2542

For variable definitions: see Table 1.2.

\*, \*\*, \*\*\* for statistical significance at 10%, 5% and 1% level respectively.

All variables are winsorized at the 5% level.

Panel B. SHE

Model #	(5)		(6)		(7)		(8)	
D. V.	IP Dummy		IP Amount		IP Dummy		IP Amount	
Sample	All firms		All firms		Non-SHEs		Non-SHEs	
	Coef.	p-value	Coef.	p-value	Coef.	p-value	Coef.	p-value
PCI	0.003	0.755	0.0001	0.806	0.0035	0.718	0.0001	0.871
AGE	0.0109**	0.044	0.0003***	0.008	0.0093*	0.098	0.0003**	0.023
SIZE	0.0950***	0.001	0.0011*	0.048	0.0985***	0.001	0.0011**	0.047
INNO	1.0155***	0.000	0.0152***	0.000	1.2256***	0.000	0.0177***	0.000
FO	-0.4885***	0.008	-0.0042	0.127	-0.2268	0.244	0.0003	0.900
SHE	5.9243***	0.000	0.0764***	0.000				
SHE*PCI	-0.0589***	0.001	-0.0007**	0.037				
SHE*AGE	0.0115	0.242	-0.0001	0.753				
SHE*SIZE	-0.2551***	0.000	-0.0035***	0.001				
SHE*INNO	-1.7156***	0.000	-0.0242***	0.000				
SHE*FO	1.4133***	0.000	0.0150***	0.002				
Year controls	Yes		Yes		Yes		Yes	
Industry controls	Yes		Yes		Yes		Yes	
Province controls	Yes		Yes		Yes		Yes	
Wald Chi2/F	254.42***		12.75***		214.49***		19.93***	

Panel B (cont'd)

Prob>Chi2/Prob>F	0.000	0.000	0.000	0.000
Pseudo R Squared/R Squared	0.0836	0.0648	0.1006	0.0832
Observation	2820	2820	1977	1977

For variable definitions: see Table 1.2.

\*, \*\*, \*\*\* for statistical significance at 10%, 5% and 1% level respectively.

All variables are winsorized at the 5% level.

Panel C. FOE

Model #	(9)		(10)		(11)		(12)	
D. V.	IP Dummy		IP Amount		IP Dummy		IP Amount	
Sample	All firms		All firms		Non-FOEs		Non-FOEs	
	Coef.	p-value	Coef.	p-value	Coef.	p-value	Coef.	p-value
PCI	-0.007	0.417	-0.0002	0.213	-0.0046	0.595	-0.0002	0.314
AGE	0.0126***	0.005	0.0003***	0.006	0.0126***	0.006	0.0002***	0.007
SIZE	0.0438*	0.084	0.0004	0.437	0.0444*	0.088	0.0004	0.445
INNO	0.8442***	0.000	0.0127***	0.000	0.9751***	0.000	0.0140***	0.000
FO	-0.3259**	0.044	-0.0041	0.112	-0.1593	0.347	-0.0019	0.482
FOE	6.3831***	0.000	0.0493*	0.069				
FOE*PCI	-0.0649***	0.005	-0.0003	0.381				
FOE*AGE	0.0261	0.283	-0.0002	0.741				
FOE*SIZE	-0.2308***	0.004	-0.0026*	0.097				
FOE*INNO	-2.4232***	0.000	-0.0299***	0.000				
FOE*FO	2.5707***	0.000	0.0385***	0.004				
Year controls	Yes		Yes		Yes		Yes	
Industry controls	Yes		Yes		Yes		Yes	
Province controls	Yes		Yes		Yes		Yes	
Wald Chi2/F	231.27***		12.59***		234.76***		19.14***	
Prob>Chi2/Prob>F	0.000		0.000		0.000		0.000	



Panel C (cont'd)

Pseudo R Squared/R Squared	0.0786	0.0616	0.0835	0.0664
Observation	2820	2820	2474	2474

For variable definitions: see Table 1.2.

\*, \*\*, \*\*\* for statistical significance at 10%, 5% and 1% level respectively.

All variables are winsorized at the 5% level.



## **CHAPTER 2**

# **POLITICAL CONNECTION HETEROGENEITY AND FIRM VALUE IN VIETNAM<sup>8</sup>**

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<sup>8</sup> This chapter is a joint work with Michael Frömmel (UGent).

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## **ABSTRACT**

The observation of firms' political connections (PCs) in both types of ascribed and acquired PCs has raised the question of their benefits to firms' operation. Based on 1,365 Vietnamese listed firm-year observations from 2010 to 2014, we find that although firms with both ascribed and acquired PCs have lower firm value (FV) than firms without any PCs, firms with acquired PCs exhibit better FV than those with ascribed PCs. The results also reveal that concentrated ownership (CO) has a moderation impact on the association between acquired PCs and FV while it can help firms with acquired PCs in improving FV.

**Keywords:** Political connections; Concentrated ownership; Firm value.

**JEL classification:** G32, G38, O16, O53.

## 2.1 Introduction

The institutional environment affects the way in which corporations in emerging markets operate and behave. One of the key aspects in which firms in emerging markets differ from those in developed markets is in the level of PCs. Firms with PCs can enjoy many preferential treatments, such as bailouts from the government, advantaged regulations, benefits from tax policy and priority in access to finance (Johnson & Mitton, 2003; Khwaja & Mian, 2005; Faccio et al., 2006; Agrawal & Knoeber, 2001). Although corporate PCs appear to be widespread around the world, they are likely to be more pronounced in emerging markets due to the institutional features of such markets where markets fail and institutions are weak as characterized by weak rules of law, rampant corruption, government control of the press, a lack of accountability and transparency, government intervention in business activities and low quality public governance (Fan et al., 2011; Nee & Oppen, 2007; Kinghan & Newman, 2015). Thus, emerging markets provide a rich setting to explore the role of PCs in a market economy.

PCs refer to formal and informal ties between firms and political powers: for example, the equity ownership of the state or managerial connections with politicians (Faccio, 2006; Inoue et al., 2013; Sun et al., 2015; Deng et al., 2018). In other words, some PCs are naturally obtained or ascribed but some others are acquired instrumentally. Firms with ascribed PCs are fundamentally different with those with acquired PCs (Deng et al., 2018). Ascribed PCs are defined as connections which the firms naturally get; however, acquired PCs are the ones the firms need to create or develop via managerial-based political ties.

The benefits of firms with ascribed PCs come from strong relationships with the government via state ownership of their equity (Duanmu, 2014; Xia et al., 2014). Li et al. (2014) show that state-owned enterprises (SOEs) receive strong assistance from the government when they run their business in their home country. While SOEs are known as firm with equity-based political ties, non-SOEs can also develop the connections with

politicians for opportunistic purposes via managerial-based political ties, which are called acquired PCs. However, acquired PCs are more fragile than ascribed PCs when firms with acquired PCs always need to seek or maintain their PCs, but SOEs with natural PCs do not. However, while bringing many benefits, PCs can also come with costs for the firm when the politically connected managers are rent-seeking, as explained by agency theory (Nguyen & van Dijk, 2012). Firms with PCs always need to make informal payments for the benefits they get. Hence, it has raised the question about if the heterogeneity of political connections leads to a difference in firm value among firms with ascribed or acquired PCs and firms without any type of PCs.

It is likely that there is a link between firm's ownership and their PCs, since both ownership and PCs have an impact on the firm's decision making. The concentration or diffusion of firm's ownership plays an important role in firm's efficiency. Different with firms with concentration in ownership, managers in firms with diffuse ownership have significant power at hand; however, their interests do not coincide with those of shareholders. Hence, the use of corporate resources does not focus on maximizing the benefits of shareholders, which they deserve to get. A strong positive relation between concentrated ownership (CO) and corporate performance can be found in developed countries (Shleifer & Vishny, 1986; McConnell & Servaes, 1990; Zingales, 1994; Claessens & Djankov, 1999) because firms with concentration in ownership seem to have better monitoring and result with better performance. The results are similar with transition economies where CO has a positive impact on stock price or firm performance (Claessens, 1997; Weiss & Nikitin, 1998; Xu & Wang, 1997; Earle & Estrin, 1996). Firms with CO may have less probability of an increasing agency cost, which is brought by PCs of firms. It can be explained that a lack of concentration in ownership leads to agency problems, resulting in inferior performance (Gaur, Bathula, & Singh, 2015). Moreover, firms with concentration in ownership may have a stronger focus on getting benefits from their

PCs rather than those with diffuse ownership. Therefore, CO plays an important role in the impact of PCs on firm efficiency.

Much of the empirical work on the impacts of PCs has been done with diversification in the results (e.g. Li et al., 2008; Wu et al., 2012; Du & Girma, 2010; Sheng et al., 2011; Su & Fung, 2013; Wong, 2016; Boubakri et al., 2008; Adhikari et al., 2006; Zhang et al., 2014; Ding et al., 2014; Chen et al., 2017), or even with a main focus on the impacts of managerial-based and equity-based political ties (e. g. Deng et al., 2018). Moreover, the topic of CO and firm performance is not a new one (e. g. Chen et al., 2005; Lefort & Urzúa, 2008; Claessens & Djankov, 1999; Wang & Shailer, 2013; Altaf & Shah, 2018; Gaur et al., 2015). However, there is still a gap in the literature on the multiple impacts of PCs on firm value focusing on the heterogeneity of PCs between ascribed and acquired ones, and the previous studies especially overlook the moderation effect of CO on the relation between PCs and firm value. Hence, in order to address the research gap associated with the heterogeneous effects of PCs as well as the moderation influence of CO, the aims of this chapter are therefore to analyze whether (i) firms with ascribed PCs have better firm value (FV) than those without any PCs; (ii) firms with acquired PCs have higher FV than those without any PCs; (iii) CO plays an important role in the impact of acquired PCs on FV and (iv) acquired politically connected firms exhibit higher FV than ascribed politically connected firms. In order to do so, we use different sub-samples from a unique dataset of 1,365 firm-years based on 273 firms listed on the Hanoi Stock Exchange (HNX) and the Ho Chi Minh stock exchange (HOSE) in Vietnam for the period 2010–2014 to have a pairwise comparison for each of hypothesis.

We choose Vietnam for several reasons. First, Vietnam shows a typical picture of an emerging market (Meyer & Nguyen, 2005). Second, Vietnam is a network-oriented economy (Pham & Talavera, 2018), where networks or connections play important roles in doing

business (To & Tran, 2005). Third, a very high level of corruption can be found in Vietnam<sup>9</sup>, which is a proof that firms may need to make informal payments for their connections “in order to get things done”; therefore, PCs not only bring firm benefits, but also, they bring costs. Fourth, with shifting from a centrally planned to a market economy from the economic and political reforms under Đổi Mới in 1986, Vietnam has showed remarkable economic development and now has become one of the most dynamic emerging countries in East Asia region<sup>10</sup>; hence, the study can be seen as one of the most important references in order to build up a better environment for economic development.

Our mostly empirical contribution to the literature is in four aspects. First, the study provides new insights into PCs by figuring out the heterogeneous impacts of PCs on FV by using two perspectives of PCs including ascribed and acquired PCs and considering the importance of ownership structure in the impact of PCs on FV. Second, related to agency theory, we find that a higher FV is not exhibited from PCs because of the increasing agency cost; but in the case of firms with CO, acquired PCs can exhibit some benefit. This also sheds the light on the literature about the link between ownership structure and PCs in emerging markets. Third, we introduce the new and clearer measure of PCs, which is easier and more reliable to collect in an emerging market like Vietnam. Fourth, we add a country study for Vietnam to the emerging literature on the relationships of PCs, CO and FV.

The chapter proceeds as follows. Section two shows the literature review and hypotheses development. Section three introduces data and models. Section four presents the analysis results. Section five gives some discussions and conclusion.

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<sup>9</sup> Vietnam is ranked 112 out of 168 countries in the 2015 Global Corruption Report. The score equals 31 in the Corruption Perceptions Index (CPI), which ranges between 100 (highly clean) and 0 (highly corrupt). The information is available at <http://www.transparency.org/country#VNM>

<sup>10</sup> Available at <http://www.worldbank.org/en/country/vietnam/overview>



## **2.2 Literature review and hypotheses development**

Previous studies suggest several benefits of PCs for firms, including access to privileged financing sources, subsidies or the use of contacts and knowledge to obtain favors when developing new regulations or participating in contracts with government authorities (Agrawal & Knoeber, 2001; Pérez et al., 2015). Besides that, Faccio (2006) argues that political relationships can help firms to exploit weaknesses in their institutional environment and lead to preferential government treatments such as, for instance, easier access to bank financing, lower tax rates, more contracts with the government and less strict regulatory supervision. Boubakri et al. (2008) show that politically connected firms have less budget constraints and are less exposed to competition than firms without PCs. Moreover, firms with PCs can easier attract investments. Duchin and Sosyura (2012) conclude that politically connected firms receive more public investment than firms without. Summing up, the benefits of PCs can lead to superior performance and increase the FV of politically connected firms (Hillman, 2005). This is especially relevant in an emerging economic setting with high corruption and weak rule of law enforcement, since PCs may result rent-seeking behaviour of politically connected shareholders and/or managers (Muttakin et al., 2015).

In emerging markets, politically connected firms can be recognized by equity shareholding and managerial ties (Inoue et al., 2013; Sun et al., 2015; Deng et al., 2018). From the perspective of equity shareholding, the state owns more than 50% of the firm's total shares can be seen as a strong proof for the connection between firm itself and political powers. Besides, the representatives of state ownership in SOEs are also known as politicians who have close relationships with governmental authorities (Nguyen, 2006). Hence, this strong connection grants firms many benefits. With the perspective of managerial relationships, managers of the firms may actively seek the connections with politicians. With political networks acquired in various ways, firms can get many benefits even with informal payments

(Nguyen & van Dijk, 2012). To sum up, firms may have their PCs by two types: managerial-based political ties as acquired PCs or equity-based ones as ascribed PCs.

Ascribed PCs are known as the natural political ties, which SOEs have via state-ownership in firm's equity. Because of the strong relationship between SOEs and the government, the firms of course receive many advantages from the government. However, it can be found that there is the lack of efficiency of SOEs (Boubakri et al., 2008). The inefficiency in acquired politically connected firms can be explained by several reasons. First, the political view of SOEs posits that the high political interference in the decision-making process of these firms distorts the objectives defined for managers (Shleifer and Vishny, 1994). It can be known that SOE's managers seek to maximize their own benefits or ensure success in elections, and a long tenure in power rather than maximizing profit or value of firms. Second, a lack of outside monitoring makes firms with ascribed PCs inefficient (Jensen & Meckling, 1976; Grossman & Hart, 1983; Nguyen & van Dijk, 2012). Laffont and Tirole (1993) also believe that the inefficiency of SOEs is because the managers of those firms are not adequately monitored, as there is no individual owner with the necessary incentives to do this. Moreover, natural PCs of SOEs are also the means, which the government and affiliated politicians use to extract the benefits at the expense of wealth maximization for the benefit of other stakeholders in the firm (Boubakri et al., 2008).

Vietnam is characterized by a high share of SOEs. SOEs in Vietnam are defined as the firms in which the government owns an effective controlling interest, with the objectives of helping the government in shouldering a number of social responsibilities, operating for the benefit of society coping with market failures. This leads to the fact that SOEs are not oriented towards and do not try to maximize profits like private companies. Therefore, SOEs in Vietnam are always put under the political system (Nguyen, 2003) and enjoy many priorities in government investments, using 60% of national capital resources (Nguyen, 2006). The leaders

of Vietnamese SOEs are the representatives of state's capital in the firms and known as politicians or the ones who have strong connections with politicians. Therefore, with strong connections with political power, SOEs can achieve many benefits and advantages, which they cannot obtain if they were privately owned. The literature suggests that SOEs are likely to have competitive advantages in form of preferential treatments, and this mainly occurs in economies with weak institutions and legal regimes, thus typically in emerging markets like Vietnam. The benefits that SOEs obtain include preferential access to credit, regulatory protection or government aid to financially distressed firms. But from this reason, SOEs often need to make informal payments to maintain their political connections, which bring to them many benefits (Nguyen & Van Dijk, 2012). Therefore, corruption is mainly a big problem in SOEs.

Vietnamese SOEs, besides having many benefits, also have many problems and costs, which all are created from their acquired PCs. We, therefore, hypothesize that the following:

*H1: Firms with ascribed PCs have lower firm value than firms without any PCs.*

Vietnam is a network-oriented economy (Pham & Talavera, 2018) and firms always do business easier with better networking. However, in a country with a very high level of corruption like Vietnam<sup>11</sup>, firms always need to pay in order to maintain their PCs (or even create a new one). It is usual that informal payments need to be made by the firms who “want to get things done”. In this case, if the benefits from connections are higher than the costs, firms with PCs may have a higher firm value than those without PCs. However, the CEO of the firm may first think about his/her benefits rather than of the right of shareholders. This is the case

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<sup>11</sup> Vietnam scored 31 in the Corruption Perceptions Index (CPI), which ranges between 100 (highly clean) and 0 (highly corrupt). The information is available at <http://www.transparency.org/country#VNM>

especially in Vietnam being a country with a weak corporate governance framework resulting in low shareholder influence (Bertrand et al., 2018). Therefore, acquired PCs come with both benefits and costs. In terms of a “helping hand”, a number of studies have found that acquired PCs can help firms to gain a number of benefits (Chen et al., 2017) including benefits from soft-budget constraints, a lower risk of liquidity constraints, benefits from tax policy, stronger market power, receiving government contracts or even more relaxed regulations. It can be recognized that a number of papers have shown that firms can gain many advantages from their close relationships with political power. It suggests that politicians often use their political power to give economic favors to the firms, which whom they have strong connections (see Fisman, 2001; Johnson & Mitton, 2003; Faccio et al., 2005; Sapienza, 2004; Amore & Bennedsen, 2013; Adelino & Dinc., 2014; Schoenherr, 2018). However, in this case, politicians prefer private ownership rather than shareholding ownership because they can seek rent or extract more resources from private shareholders using bribes or excess employment (Chen et al., 2017). In contrast, in terms of a “grabbing hand”, PCs can harm firm efficiency if the officials exert political pressure to engage in rent-seeking behaviors. Besides that, firms with acquired PCs may need to deal with the agency problem because politically connected members of the board of directors try to keep the firm’s internal governance structure weak and lower its performance (Muttakin et al., 2015). Moreover, Boubakri et al. (2008) report that the managers of firms with acquired PCs lack incentives to maximize shareholder wealth or improve operating profit. Furthermore, firms always need to make informal payments to maintain their connections with political power. In other words, preferences that firms get also come with costs.

In an emerging market like Vietnam, acquired PC firms always need to make informal payments to maintain their connections with politicians, together with agency cost creating

from the problem of information asymmetry. The costs in which firms need to bear seem higher than the benefits firms get; hence, we hypothesize the following:

H2a: Firms with acquired PCs have lower firm value than those without any PCs.

Even acquired PCs can have negative effects on firm value since acquired PCs may come to firms with costs, but we still think that firms can benefit from their acquired PCs with the belief that CO can help. Different that diffuse ownership, firms with CO can have less probability of facing agency problems; besides, CO can help acquired PC firms to concentrate on maximizing the benefits from PCs in comparison with cost. Furthermore, firms with concentration in ownership seem to have better monitoring and results with better performance since firms can focus easier on the goals of maximizing profit. Therefore, the following can be hypothesized:

H2b: Acquired politically connected firms with CO have higher firm value than those with diffuse ownership and firms without any PCs.

Although both ascribed and acquired PCs bring firms with disadvantages since all types of PCs are hypothesized to have negative effects on firm value, except acquired politically connected firms with CO, firms with acquired PCs are hypothesized to have higher firm value than those with ascribed PCs. It can be explained that firms with ascribed PCs are usually bureaucratic, inefficient and incapable of maximizing profit (Williamson & Raman, 2011; Deng et al., 2018). Vietnamese SOE managers have weaker motives to pursue profit and efficiency than those in private-owned firms (Ramstetter and Phan, 2013). First, SOEs are often expected to be relatively inefficient compared to other firms. The Vietnamese government has

often put SOEs in a competitively lacking environment that weakens the pressure on the SOEs to run the firm efficiently. The second reason of the weak motives of SOE managers is salaries or bonuses. The managers of SOEs are the representatives of a state's share in firms, and they manage the firms as their jobs and all they receive is a low salary that is paid by the government; therefore, firms' profit or loss does not have much influence on them. In contrast, firms with acquired PCs, particularly the managers of those firms, have interdependence with the state, which helps firms have more efficient monitoring and management, resulting in better performance. So, the hypothesis is as follows:

H3: Firms with acquired PCs have higher firm value than those with ascribed PCs.

## **2.3 Data and models**

### *2.3.1 Data*

Our data set covers the financial and non-financial information of the Vietnamese listed firms on the two main stock exchanges in Vietnam including Hanoi Stock Exchange (HNX) and Ho Chi Minh Stock Exchange (HOSE). The financial information is provided by HNX and HOSE. We eliminate all financial firms from the sample and start with 510 non-financial firms listed in both stock exchanges in 2010. We exclude firms that do not have financial information and firms that stop being listed in stock exchanges during the period from 2010 to 2014. In total, we remove 237 firms including 162 firms listed in Hanoi stock exchange and 142 firms listed in Ho Chi Minh City stock exchange and finalize with a sample of 273 firms from 2010 to 2014 including 131 firms listed in Hanoi stock exchange and 142 firms listed in Ho Chi Minh City stock exchange. After that, we manually collect the non-financial information from annual reports and firms' websites. The data sample is strongly balanced panel data and incorporates the period from 2010 to 2014 with 1,365 observations of 273 firms.

### 2.3.2 Models

We use different sub-samples for different models to have pairwise comparisons. We first examine the link between ascribed PCs and FV with the hypothesis that firms with ascribed PCs have lower FV than firm without any PCs. By using the sub-sample of firms with acquired PCs and firms without any PCs, the regression equation is specified as follows:

$$(1) \text{VALUE}_{it} = \alpha + \beta \text{ASCRIBEDPCS}_{it} + \sum \gamma \text{CONTROLS}_{it} + \varepsilon_{it}$$

We use firm growth (FGROWTH), leverage (LEV), firm size (FSIZE), board size (BSIZE) and duality (DUAL) to control for factors that potentially affect FV in this model.

The sub-sample of firms with acquired PCs and firms without any PCs is used to test the effects of acquired PCs on FV with the following regression equation:

$$(2) \text{VALUE}_{it} = \alpha + \beta \text{ACQUIREDPCS}_{it} + \sum \gamma \text{CONTROLS}_{it} + \varepsilon_{it}$$

We continue to use firm growth (FGROWTH), leverage (LEV), firm size (FSIZE), board size (BSIZE), duality (DUAL) and CO to control for factors that potentially affect firm value (VALUE) in this model.

Moreover, we believe that the impact of acquired PCs is heterogeneous by the CO; hence, we further explore the importance of CO on the impact of PCs and FV. To do so, we use the sub-sample of firms with acquired PCs to test whether in acquired politically connected firms, those with concentrated ownership can have better firm value than others.

$$(3a) \text{VALUE}_{it} = \alpha + \beta \text{CO}_{it} + \sum \gamma \text{CONTROLS}_{it} + \varepsilon_{it}$$

We continue to use a sub-sample of firms with acquired PCs and firms without any PCs to examine whether acquired politically connected firms with CO have better firm value than others with the following regression equation:

$$(3b) \text{VALUE}_{it} = \alpha + \beta_1 \text{ACQUIREDPCS}_{it} + \beta_2 \text{CO}_{it} + \beta_3 \text{ACQUIREDPCS}_{it} * \text{CO}_{it} + \Upsilon \text{CONTROLS}_{it} + \varepsilon_{it}$$

Regression equation (4) is used to test whether firms with acquired PCs have higher FV than those with ascribed PCs, because firms with ascribed PCs are usually known to be strongly bureaucratic and inefficient in performance. In comparison with firms with ascribed PCs, those with acquired PCs have the interdependence with the state, which can help those firms get preferential treatment from political powers without the strong bureaucracy in running business. We formulate the model as the same with model (1), but we just focus on the sub-sample of firms with PCs only:

$$(4) \text{VALUE}_{it} = \alpha + \beta \text{ACQUIREDPCS}_{it} + \Sigma \Upsilon \text{CONTROLS}_{it} + \varepsilon_{it}$$

In all equations, subscripts *i* and *t* present for firm and time. VALUE is the market valuation indicator. The two stock market valuation measures used to proxy for VALUE are Tobin's Q (Q) and the market-to-book ratio (MTB).

We confined firms with ascribed PCs to SOEs. We list a firm as SOE if the state owns more than 50% of the total shares. ASCRIBEDPCS equals 1 if the firm is state-controlled and 0 otherwise. For acquired politically connected firms, we recognize those firms based on comparing the information of the firm and the top politicians of Vietnam. We regard that the



firm is with acquired PCs when the firm is a private-owned enterprise and meets one of the following conditions:

(1) CEO or chairman of the board have the same native hometown with one of the top politicians of Vietnam and the firm itself has headquarters or a representative office in Hanoi or Ho Chi Minh City.

(2) One of the members of the manager board of directors is/was a member of Parliament or Provincial People's Council.

(3) the firm is a former SOE.

(4) CEO or chairman of the board is a former government official/ bureaucrat.

We think that if the CEO or chairman of the firm has the same native hometown (at the district level) and the firm itself has headquarters or a representative office in the two biggest cities in Vietnam including Hanoi or Ho Chi Minh City, it can be easy to get the connections with politicians via the activities of the fellow-countrymen association (usually known under the name “Hội đồng hương”), where the top politicians are also members. The reason of focusing on just two biggest cities is because most of the activities of the top politicians happen in those cities; hence, it is easier for firms to get the connections. We do not focus on the measure of ACQUIREDPCS based on the membership of the Communist Party of Vietnam because the information of the management and director board that is available in annual reports or other official channels of the firms do not disclose such membership.

We define the firms with CO when the top 5 shareholders own more than 20% the total share of the firm. We consider 20% because it is the minimum percentage of a firm's equity considered as a controlling interest (La Porta et al., 1999). We use firm growth (FGROWTH), leverage (LEV), firm size (FSIZE), board size (BSIZE) and duality (DUAL) to control for factors that potentially affect firm value (VALUE). Firm growth (FGROWTH) is measured by the growth speed (percentage) of total assets (Nguyen & Van Dijk, 2012); Firm size (FSIZE)

is the natural logarithm of book value of total assets (Cheng, 2008; Liu et al., 2015; Harjoto et al., 2015; Kabir & Thai, 2017); Leverage (LEV) is measured as total debt over total assets (Phan, 2018; Le et al., 2014; Nguyen et al., 2018); Board size (BSIZE) is the natural logarithm of the total number of directors (Kabir & Thai, 2017); Duality (DUAL) is a dummy variable of whether or not the CEO of the firm is also the chairman of the board (Doğan, 2013; Le et al., 2014). Firms with larger firm size or higher growth tend to have lower growth opportunities, leading to lower firm value (Konijn et al., 2011). Based on Yermack (1996), from the perspective of agency theory, smaller boards are more effective and thus have a positive contribution to firm value. However, resource dependence theory suggests that a larger board size can help to increase corporate performance and firm value (Dalton et al., 1999). Hence, the empirical evidence about the effect of the board size on firm value is mixed. The effect of leverage is also mixed. Higher leverage means higher agency costs and diverging interests across managers, shareholders, and debtholders. This causes a negative link between leverage and firm value (Le et al., 2014). However, leverage is also known as an important role in boosting corporate value (Nguyen et al., 2018) because of the benefit of a tax shield (Miller & Modigliani, 1963). In case of duality, the CEO of the firm may exert his/her own authority during decision making process and the board of directors or even the chairman himself may not be able to assess the CEO's duties in an effective way, which consequently decreases the firm value (Doğan, 2013). The definitions of all variables are shown in the table 2.1.

[Insert Table 2.1 here]

## 2.4 Results

### 2.4.1 Descriptive statistics

The panel A of table 2.2 shows the description of the variables employed in the analysis. We winsorize all continuous variables at 5% level. It presents that more than 52% (720 firm-year observations) of the sample have connections with political powers, including 15% are with ascribed and 37% with acquired PCs. The description about observations with ascribed and acquired PCs is shown in detail in the panel B of table 2.2. With regard to firm value, we find that the average of MTB is 0.83. The literature reports values of 0.92 (Nguyen et al., 2018), 0.83 (Nguyen et al., 2015), 0.87 (Phan, 2018), 0.77 (Connelly et al., 2017). The average Q is 0.65, while Nguyen et al. (2108) reports a value of 0.69. The average BSIZE of the firms in the sample is about 5 members. This is similar to the results found by Kabir and Thai (2017) and Le et al. (2014). The mean value of LEV is 0.5, similar to values from the literature (0.53 by Kabir & Thai, 2017, 0.51 by Nhung & Okuda, 2015, and 0.5 by Phan, 2018).

[Insert Table 2.2 here]

The correlations among variables are shown in Table 2.3. The results from this table indicate that all correlation coefficients between independent variables are lower than 0.5, so there is no serious multi-collinearity (Xia et al., 2014; Sun et al., 2016; Deng et al., 2018). MTB is highly correlated with Q (0.91). All types of PCs including ASCRIBED and ACQUIRED PCs are significantly positively correlated with MTB and Q. Among control variables, LEV and BSIZE are significantly positive correlated while DUAL and FSIZE are significantly negative correlated with both MTB and Q.

[Insert Table 2.3 here]

#### *2.4.2 Regression results*

As the data used contains a panel component, problems can occur with regard to cross-sectional characteristics as heteroscedasticity or time-series characteristics as autocorrelation and omitted variables. With those problems, fixed effects model and random effects model are the most usually estimations to address. In case of a balanced panel data, fixed effects model is preferred (Kabir & Thai, 2017). Yet, we take a robustness check for panel regression estimations. Accordingly, the Hausman test is used to test whether fixed or random effects model is chosen and the results indicate that the fixed effects model is more suitable. We continue to use F test to choose between OLS and fixed effects model. The test shows that fixed effects model is the most suitable one. The table 2.4 presents the regression results of fixed effects model. We divide the sample into different sub-samples to have different pairwise comparisons. The table comprises five panels: Panels A for regression results to test whether ascribed PC firms have lower firm value than non-PC firms; panel B for regression results to test whether acquired PC firms have lower firm value than non-PC firms; panel C for regression results to test whether acquired PC firms with concentrated ownership have higher firm value than those with diffuse ownership; panel D for regression results to test whether acquired PC firms with concentrated ownership have higher firm value than those with diffuse ownership and non-PC firms; and panel E for regression results to test whether acquired PC firms have higher firm value than ascribed PC firms.

By using the sub-sample of firms with ascribed PCs and firms without any PCs, the panel A of table 2.4 shows that the regression coefficients of ASCRIBEDPCS are significantly negative in both case of MTB and Q. The negative coefficients of ASCRIBEDPCS indicate that SOEs have lower firm value than the companies without any PCs. Among the control

variables, the coefficients of FGROWTH, FSIZE and DUAL are significantly negative while the coefficient of LEV is significantly positive. The negative coefficients of FGROWTH and FSIZE are consistent with the expectation that larger sized firms may have less opportunities for improving corporate performance and firm value. The negative coefficient of DUAL is also consistent with the idea that duality creates the ineffectiveness in managing the firm which translates into a lower firm value (VALUE). The positive coefficient of LEV is in line with the expectation that leverage can boost corporate value (Nguyen et al., 2018).

In the panel B, with sub-sample of firms with acquired PCs and firms without any PCs, we find that the coefficients of ACQUIREDPCS are negative significant in both case of MTB and Q. This is consistent with our hypothesis that firms with acquired PCs need to make informal payment to create or maintain their connections with politicians; besides that, they also need to face with agency problems since acquired PCs create information asymmetry, which negatively influence on firm value. The panel B also indicates that the regression coefficients of FGROWTH and FSIZE are both negative significant and the one of LEV is positive significant. The coefficients of BSIZE and DUAL are not significant.

The panel C is with sub-sample of firms with acquired PCs only to test whether acquired PC firms with CO have higher firm value than those with diffuse ownership or not. The regression results show that the coefficients of CO are significantly positive in both case of MTB and Q. The positive coefficients of CO are consistent with the expectation that CO can help firms with acquired PC to avoid the problem of information asymmetry, which translates to a higher firm value (VALUE).

In the panel D, with sub-sample of firms with acquired PCs and firms without any PCs, we find that the coefficients of ACQUIREDPCS are significantly negative in both cases of MTB and Q, but the coefficients on the interaction term between ACQUIREDPCS and CO turn significantly positive. The negative coefficients of ACQUIREDPCS indicate that in firms

with acquired PCs have lower firm value (VALUE) than those without any PCs; in contrast, the positive coefficients on the interaction term between ACQUIREDPCS and CO shows that acquired PC firms with CO exhibit higher firm value (VALUE) than firms without any PCs. The results are consistent with our expectation that CO can help firms with acquired PCs to avoid the problems of information asymmetry and focus more on maximizing profits firms can get from their PCs.

The final panel of table 2.4 is with the sub-sample of firms with ascribed and acquired PCs. Regarding to our variable of interest, our hypothesis that firms with acquired PCs have higher firm value than those with ascribed PCs is confirmed. The regression coefficients of ACQUIREDPCS are significantly positive in both cases of MTB and Q. The positive coefficients of ACQUIREDPCS indicate that in comparison with firms with acquired PCs, Vietnamese SOEs performs ineffectively, even they receive many benefits from their close relationship with the Government.

[Insert Table 2.4 here]

## **2.5 Conclusion**

Our results show that SOEs, known as ascribed politically connected firms, have lower FV than firms without any types of PCs. Besides, firms with acquired PCs have lower FV than non-politically connected firms. It can be explained with the argument that in emerging economies where there is a weak rule of law, weak regulatory environment, poor investor protection and high level of corruption, the business elites potentially exploit their political linkages to influence the system in accumulating their own wealth at the expense of general shareholders (Li et al., 2008; Mutakin et al., 2015). Hence, politically connected firms in any cases, especially acquired politically connected firms, have to make or bear the informal

payments or the informal cost of creating connections with politicians. Moreover, SOEs in emerging economies, especially in Vietnam, are always put under the political system (Nguyen, 2003) and enjoy many priorities (Nguyen, 2006) but they always claim a disproportionate share of national investment in land, property and physical assets with a less than proportionate increase in enterprise performance (Minor et al., 2017); so far this causes the low firm effectiveness. The political and bureaucratic interference and ownership has made SOE's control and monitor systems for political interest other than effectiveness; that is the reason why SOEs, which are known as firms with ascribed PCs, have weaker motives to pursue profit and efficiency than those in privately-owned firms.

As discussed, informal expenses can rise in acquired politically connected firms, but it cannot be disclaimed that with PCs firms can receive many benefits from the political powers. In the case that firms can lower the costs brought from PCs and maximize the benefit, which they can get from their PCs, firms can get the advantages. We find that with concentrated ownership, acquired politically connected firms can have better FV than those with diffuse ownership and also firms without any PCs. It can be explained that in firms with diffuse ownership, acquired PCs can cause an increase in agency problems along with agency cost because of the problem of information asymmetry; but in contrast, acquired politically connected firms with CO can avoid the increase of agency problem. Moreover, CO can help acquired politically connected firms focusing more on maximizing profits or advantages they get from their PCs. In the developed markets, a strong institutional setting and strong corporate governance may help shareholders in monitoring the PCs; but in emerging economies, with the absence of a strong institutional environment and strong corporate governance, political agents may engage in wealth expropriation at the expense of other shareholders, especially minority shareholders.

This study offers important practical implications for managers in Vietnam in building or using their own PCs. Previous studies indicate that PCs bring to the firms many benefits and advantages, including preferential access to credit, regulatory protection or government aid to financially distressed firms (Faccio et al., 2006; Fan et al., 2007; Gul, 2006; Li et al., 2008); however, our empirical results show that PCs are not always completely positive. Muttakin et al. (2015) also show that PCs can harm firm performance in non-family firms since the agency problem also comes with PCs. It also gives the implications for Vietnamese Government in building a strong institutional setting as well as strong corporate governance regulations in order to have better environments for firms.



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## TABLES

Table 2.1 Variable definitions

Variable	Definition
MTB	Market to book value. Measured by Market Capitalization divided by book value of total assets.
Q	Tobin's Q. Measured by market value of equity divided by book value of equity.
ASCRIBEDPCS	Ascribed Political Connections A binary variable which equals one if the firm is a SOE and zero otherwise.
ACQUIREDPCS	Acquired Political Connections A binary variable, equals one if the firm is acquired political connected and zero otherwise.
FGROWTH	Asset Growth rate
LEV	Measured by the ratio of total debt to total assets.
FSIZE	Measured by natural logarithm of book value of total assets.
BSIZE	Measured by natural logarithm of the total number of director
DUAL	A binary variable which equals one if the chairman of the firm is also the CEO and zero otherwise.
CO	Concentrated ownership A binary variable, equals one if the firm is the one with concentrated ownership and zero otherwise.

Table 2.2 Variable description

Panel A. Descriptive statistics

Variable	Mean	S.D.	Min	Max
MTB	0.83	0.13	0.55	2.77
Q	0.65	0.14	0.37	2.02
ASCRIBEDPCS	0.15	0.36	0	1
ACQUIREDPCS	0.37	0.48	0	1
FGROWTH	0.13	0.23	-0.18	0.71
LEV	0.50	0.20	0.13	0.81
FSIZE	1227.70	1730.98	40.94	6637.75
BSIZE	4.60	0.81	5	7
DUAL	0.35	0.48	0	1
OC	0.50	0.50	0	1

Notes:

For variable definitions: see Table 2.1.

FSIZE is measured by the book value of total assets.

BSIZE is measured by the total number of director.

Panel B. Firm-year observations with PCs over years

Year	Ascribed PCs	Acquired PCs	Total
2010	60	52	112
2011	59	56	115
2012	42	84	126
2013	28	155	183
2014	20	164	184
Total	209	511	720

Table 2.3 Correlation coefficients

Variable	1	2	3	4	5	6	7	8	9	10
1 MTB	1									
2 Q	0.91 ***	1								
3 ASCRIBEDPCS	-0.09 ***	-0.12 ***	1							
4 ACQUIREDPCS	-0.07 ***	-0.07 **	-0.33 ***	1						
5 FGROWTH	-0.02	-0.06 **	0.02	-0.12 ***	1					
6 LEV	0.46 ***	0.30 ***	-0.02	-0.09 ***	0.18 ***	1				
7 FSIZE	-0.06 **	-0.09 ***	-0.05 *	-0.12 ***	0.16 ***	0.34 ***	1			
8 BSIZE	0.23 ***	0.21 ***	0.11 ***	-0.03	0.06 **	0.17 ***	0.02	1		
9 DUAL	-0.17 ***	-0.12 ***	0.13 ***	0.06 **	-0.07 **	-0.33 ***	-0.11 ***	-0.06 **	1	
10 OC	-0.06 ***	-0.04	0.37 ***	-0.07 ***	0.00	-0.03	0.10 ***	0.17 ***	0.10 ***	1

Notes:

For variable definitions: see Table 2.1.

\*, \*\*, \*\*\* for statistical significance at 10%, 5% and 1% level respectively.

All continuous variables are winsorized at the 5% level.

Table 2.4 Estimation Results: Political connections and firm value

Panel A. Ascribed PC and non-PC firms

Sample	Ascribed PC and non-PC firms			
Model #	(1)		(2)	
D. V.	MTB		Q	
	Coef.	p-value	Coef.	p-value
ASCRIBEDPCS	-0.0298**	0.023	-0.0594***	0.001
FGROWTH	-0.0181**	0.038	-0.0335***	0.004
LEV	0.3327***	0.000	0.2799***	0.000
FSIZE	-0.0326***	0.001	-0.0276**	0.029
BSIZE	0.0161	0.250	0.0207	0.267
DUAL	-0.0082*	0.078	-0.0117*	0.061
Constant	0.8613***	0.000	0.6776***	0.000
Stock exchange controls	No		No	
Industry controls	No		No	
Year controls	Yes		Yes	
R squared	0.3011		0.1811	
F	25.72		13.21	
Prob>F	0.000		0.000	
N	854		854	

Notes:

For variable definitions: see Table 1.

\*, \*\*, \*\*\* for statistical significance at 10%, 5% and 1% level respectively.

All continuous variables are winsorized at the 5% level.

Panel B. Acquired PC and non-PC firms

Sample	Acquired PC and non-PC firms			
Model #	(3)		(4)	
D. V.	MTB		Tobin's Q	
	Coef.	p-value	Coef.	p-value
ACQUIREDPCS	-0.0121***	0.002	-0.0218***	0.000
FGROWTH	-0.0184**	0.011	-0.0383***	0.000
LEV	0.3216***	0.000	0.2510***	0.000
FSIZE	-0.0291***	0.000	-0.0337***	0.001
BSIZE	0.0177	0.127	0.0063	0.706
DUALITY	-0.0025	0.483	-0.0016	0.753
CO	0.0085**	0.026	0.0217***	0.000
Constant	0.8262***	0.000	0.7209***	0.000
Stock exchange controls	No		No	
Industry controls	No		No	
Year controls	Yes		Yes	
R Squared	0.2859		0.1479	
F	32.47		14.07	
Prob>F	0.000		0.000	
N	1156		1156	

Notes:

For variable definitions: see Table 1.

\*, \*\*, \*\*\* for statistical significance at 10%, 5% and 1% level respectively.

All continuous variables are winsorized at the 5% level.

Panel C. Acquired PC firms

Sample	Acquired PC firms			
Model #	(5)		(6)	
D. V.	MTB		Tobin's Q	
	Coef.	p-value	Coef.	p-value
CO	0.0496***	0.000	0.0892***	0.000
FGROWTH	-0.0025	0.813	-0.0203	0.210
LEV	0.3611***	0.000	0.1777***	0.000
FSIZE	-0.0395***	0.002	-0.0715***	0.000
BSIZE	-0.0158	0.397	-0.0079	0.780
DUAL	-0.0013	0.835	0.0007	0.942
Constant	0.8746***	0.000	0.9167***	0.000
Stock exchange controls	No		No	
Industry controls	No		No	
Year controls	Yes		Yes	
R Squared	0.4405		0.2963	
F	23.93		12.80	
Prob>F	0.000		0.000	
N	511		511	

Notes:

For variable definitions: see Table 1.

\*, \*\*, \*\*\* for statistical significance at 10%, 5% and 1% level respectively.

All continuous variables are winsorized at the 5% level.

Panel D. Acquired PCs and CO

Sample	Acquired PC and non-PC firms			
Model #	(7)		(8)	
D. V.	MTB		Tobin's Q	
	Coef.	p-value	Coef.	p-value
ACQUIREDPCS	-0.0454***	0.000	-0.0705***	0.000
FGROWTH	-0.0224***	0.007	-0.0306**	0.011
LEV	0.2902***	0.000	0.1966***	0.000
FSIZE	-0.0303***	0.000	-0.0372***	0.000
BSIZE	0.0050	0.722	-0.0036	0.860
DUAL	0.0013	0.754	-0.0013	0.831
CO	-0.0349	0.296	-0.0615	0.201
ACQUIREDPCS*CO	0.0752***	0.000	0.1072***	0.000
FGROWTH*CO	0.0152	0.197	-0.0068	0.688
LEV*CO	-0.0258	0.145	-0.0003	0.990
FSIZE*CO	-0.0022	0.399	0.0012	0.755
BSIZE*CO	0.0296	0.131	0.0227	0.421
DUAL*CO	-0.0130**	0.036	-0.0037	0.685
Constant	0.8797***	0.000	0.8017***	0.000
Stock exchange controls	No		No	
Industry controls	No		No	
Year controls	Yes		Yes	
R Squared	0.3723		0.2425	



Panel D (cont'd)

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F	30.92	16.68
Prob>F	0.000	0.000
N	1156	1156

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Notes:

For variable definitions: see Table 1.

\*, \*\*, \*\*\* for statistical significance at 10%, 5% and 1% level respectively.

All continuous variables are winsorized at the 5% level.

Panel E. Ascribed and acquired PC firms

Sample	Ascribed and acquired PC firms			
Model #	(9)		(10)	
D. V.	MTB		Tobin's Q	
	Coef.	p-value	Coef.	p-value
ACQUIREDPCS	0.0154**	0.040	0.0204*	0.056
FGROWTH	-0.0109	0.269	-0.0239*	0.090
LEV	0.3753***	0.000	0.3004***	0.000
FSIZE	-0.0248**	0.023	-0.0458***	0.003
BSIZE	-0.0106	0.539	-0.0132	0.593
DUAL	0.0033	0.559	0.0074	0.353
Constant	0.7789***	0.000	0.7350***	0.000
Stock exchange controls	No		No	
Industry controls	No		No	
Year controls	Yes		Yes	
R Squared	0.3136		0.1800	
F	22.39		10.76	
Prob>F	0.000		0.000	
N	720		720	

Notes:

For variable definitions: see Table 1.

\*, \*\*, \*\*\* for statistical significance at 10%, 5% and 1% level respectively.

All continuous variables are winsorized at the 5% level.

## **CHAPTER 3**

# **SOCIAL CAPITAL, CREDIT CHOICES AND GROWTH IN VIETNAMESE HOUSEHOLD BUSINESSES<sup>12</sup>**

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<sup>12</sup> This chapter is a joint work with Michael Frömmel (UGent).

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## **ABSTRACT**

The study provides the impact of social capital on credit choices and growth of household businesses in Vietnam by using a data sample of 3,813 observations. Social capital is considered at different levels: micro for human capital and macro for social networks. It concludes that while both levels of social capital influence credit choices of household businesses, the micro level of social capital plays an important role in improving the household business's growth, including asset growth and income growth. The study develops a broader view about the use of resources and financing choices in household businesses in Vietnam. Accordingly, it highlights the importance of social capital from multiple aspects - the household business itself, human capital, social networks and government - on the development of Vietnamese household businesses.

**Keywords:** *social capital; human capital; social networks; credit choices; household business.*

**JEL classification:** *H31, J24, L25, L14, O53.*

### 3.1 Introduction

The topic of social capital and firm performance is no longer a new one, but the authors usually focus on the effect of human capital singly (Cooper et al., 1994; Van Praag & Cramer, 2001) or social networks alone (Yoon, 1991; Aldrich & Reese, 1993; Bates, 1994; Pennings et al., 1998) rather than combining them in one study. Moreover, many authors have shed light on the relationship between social capital and access to finance, indicating that better social capital may partially help firms relax their financial constraints (Ahlstrom & Bruton, 2006; Le, Venkatesh, & Nguyen, 2006; Talavera, Xiong, & Xiong, 2012; Pham & Talavera, 2018). However, they do not focus on the credit choices and firms choosing between formal or informal loans. Besides, most of the studies concentrate on the small, medium or large-sized enterprises, studying micro-enterprises like household businesses is still a gap in literature in this field.

The study aims to bridge the gaps by investigating the impact of social capital on credit choices and growth of household businesses. We focus on Vietnamese household businesses for several reasons. First, although human capital and social networks have been embraced with enthusiasm in recent development literature, until now they have not been widely studied considering the development and socioeconomic changes in Vietnam, especially with a focus on household businesses. Second, according to the World Bank's Enterprise Surveys for Vietnam (World Bank, 2015), access to finance is one of the top business obstacles for firms. Hence, with better social networks, firms are more likely to have access to financial resources especially for informal loans. For this reason, we think that social networks can affect a firm's credit choices. Third, Vietnam is a network-oriented economy (Pham & Talavera, 2018) where social capital plays an important role in running a business (Meyer & Nguyen, 2005). Fourth, social capital is becoming increasingly more important in household businesses than in larger-sized enterprises because household businesses are usually dependent on their relatives,

immediate neighbors and friends for credit (as informal loans) and support (Turner & Nguyen, 2005), or further to improve innovation and share knowledge with the aim of improving profits, productivity and their market share (Woolcock & Narayan, 2000). Last but not least, Vietnamese household businesses are now using two-thirds of the labor force in the whole society<sup>13</sup> which can help to create more economic value and also contribute socially to the sustainable development of the country. Hence, a better understanding about micro-enterprises like household businesses is necessary for the Vietnamese government to effectively run the country.

The most important finding in our study is that both levels of social capital can have effects on credit choices including informal loan choices and loan choice priority of household businesses; but only the micro level of social capital can help firms in improving the economic growth of household businesses. Specifically, with a larger household size, better support from experienced household members or higher education backgrounds of the owners, obtaining informal loans can be an option of external financing when they need financial support. Besides, firms with bigger social networks are more likely to get better financial support with informal loans. In contrast, household businesses with assistance from business associations may get easier access to formal financial sources; therefore, they might not choose informal loans. Moreover, household business owners who are members of the Communist Party may prefer formal loans since with the membership they will have stronger connections with local government officials who can help them access formal financial sources. One of the interesting results of this chapter is that while both levels of social capital have effects on credit choices, only the micro level which includes the household size, education background and household experience impact the household business's growth in both assets and income.

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<sup>13</sup> see more at <http://www.molisa.gov.vn/vi/pages/ChiTiet.aspx?IDNews=10314>

This chapter is organized as follows. Section 2 reviews the literature. Section 3 provides background about Vietnamese household businesses. Section 4 discusses the methodology. Section 5 presents the empirical results, and section 6 summarizes the findings and provides a discussion.

## **3.2 Literature review**

### *3.2.1 Social capital*

Social capital, originally based on the social capital theory, is multi-dimensional, with each dimension contributing to the meaning of social capital, even though each alone is not able to fully capture the concept (Hean et al., 2003). Generally, different scholars have defined social capital in different ways and identified different groups of dimensions (Claridge, 2004).

Social capital is characterized by the presence of a certain set of informal values, norms and networks fostering cooperation and facilitating collective action (Fukuyama, 1997; Liu & Besser, 2003; Woolcock, 2010). It focuses on the resources embedded in one's social network and how access to and use of such resources benefit the individual's actions (Lin, 2001). According to the definition by Woolcock (1998), social capital is the information, trust and norms of reciprocity inherent in a social network, where the social network provides the real-world links between groups or individuals. The central premise of social capital is that social networks bring value to individuals.

Social capital includes the values and benefits resulting from the owner's interactions and networks. According to Putnam (1993), social capital is provided by extended family-based or community-based relationships. This leads to the fact that participation in social networks benefits individuals (Aldrich & Zimmer, 1986; Johannisson, 1988). The roles of social capital have been documented in different types of networks: networks with government officials, networks with banks and other financial institutions, networks with relatives and

friends or other business-related networks (Pham & Talavera, 2018). Firms with better social capital can be seen as having more social network ties with which the firms' owner frequently has contact (Davidsson & Honig, 2003). Being a member of one or more business associations is also evidence of a stronger social embeddedness of the owner and also the firm itself (Nguyen & Luu, 2013). Moreover, based on Poon et al. (2012), social capital in entrepreneurs can be seen at micro and macro levels. The micro level is seen as the human capital of a family/household, and the macro level is the support of social associations for firms.

Moreover, human capital is assumed to be one of the main drivers of successful firms since it increases the capacity of a firm's owners to plan for future goals, acquire new knowledge, skills and other resources; it results in better performance (Cohen & Levinthal, 1990; Barney, 1995; Shane & Venkataraman, 2000; Brush et al., 2001). The requirements of human capital have been increasing, not only in quantity but also quality, with the larger role in knowledge intensive activities entailing rapid change (Sonnentag & Frese, 2002; Bosma et al., 2004). Generally, firms with a greater human capital endowment tend to have more advantages in running and managing their business. For example, they may have some more choices in using different resources, get more support or perform more efficiently.

### *3.2.2 How does social capital help household businesses?*

Many small and medium enterprises report that financial constraint is one of the major difficulties for firms (World Bank, 2016) and they need to seek external capital such as formal loans, government financial support or informal credit from different sources (Pham & Talavera, 2018). However, access to finance is one of the top business obstacles for firms (World bank, 2015). Since the Vietnamese banking sector is heavily regulated, government officials at all levels still have considerable influence on banking operations; therefore, informal credit is also an option for firms. This is especially true for household businesses since such businesses are very small and operation effectiveness is not so high, so accessing formal



credit is getting more difficult. Besides formal credit, other informal credit sources widely used in Vietnamese household businesses include the following: (1) loans from family and friends, (2) loans from private lenders and (3) trade credit from suppliers and customers (Pham & Talavera, 2018). Hence, with a larger and better social capital, household businesses tend to have informal loans, and they might prefer informal loans over formal loans.

The role of social capital is known as different types of networks of firms: networks with government and financial institutions, business-related networks and networks with family members or relatives. Different types of networks can help firms in different ways (Talavera & Pham, 2018). For example, through their relationship with government officials, firms can easier access formal loans from banks or other state-owned financial institutions with even better loan terms (O'Connor, 2000; Tenev et al., 2003; Ahlstrom & Bruton, 2006; Le & Nguyen, 2009). This can be explained by the considerable power and influence of government officials in project approval and resource allocation (Meyer & Nguyen, 2005). Moreover, membership in a business association or political party is one way to spread knowledge about a firm's existence, as well as indicate reputation (Coleman, 1988). And this may also help firms to increase the probability of accessing credit. For instance, Talavera et al. (2012) have shown that in China, membership in the Communist Party can help the firm owner to obtain loans from state-owned banks; with membership in business associations, firms have advantages when applying for commercial bank loans.

However, some studies suggest that with better social capital, firms are likely less to rely on bank financing or formal loans. It might be the case that with the support of family members/relatives or close relationships among firm's suppliers, and customers, firms can have financial support and their need for funding from the formal sector is not so strong. Another reason firms prefer informal loans rather than formal ones is the advantage of informal credit. Informal loans from family and friends are more convenient, with lower interest rates, longer

durations and no collateral or guarantee requirements. In Vietnam, Nguyen et al. (2006) have found that informal loans are the principal sources of external financing of many private SMEs. Le and Nguyen (2009) state that social networks lead to a reduction in the need and use of formal credit.

Besides informal credit, social capital can help firms to improve their performance. It can be explained that firms can rely on their social resources to improve innovation and share knowledge with the aim of improving profits, productivity and their market share (Woolcock & Narayan, 2000). Poon, Thai and Naybor (2012) conclude that children and male family members as family social capital (the micro) contribute to women's probability of becoming entrepreneurs, but institutional social capital (the macro) has the opposite effect. As an explanation, since family members are invested in the business, they are more likely to be productive, offering loans as well as unpaid time and labor in economic production or even share knowledge and professional experience in order to help the owner run the business. Children, relatives or a household's members are important sources of labor for many household businesses. They contribute to reducing the costs of running a business by providing free labor to the firms. Santarelli and Tran (2013) state that human capital plays an important role in firms' performance. Particularly, professional education, experience and learning positively affect a firm's operating profit. Besides, social networks as customers, business partners or other members of business associations can share a firm's experience, techniques or other support in the form of materials, labor and contracts; therefore, this contributes to improving firm performance and growth. For instance, network participation and network size are important factors that influence operating profit (Santarelli & Tran, 2013).

The support of a household's human capital and social networks as social capital is more important in household businesses than larger-sized enterprises because of the characteristic of this type of business. Santarelli and Tran (2013) mention that the informality of the business

environment of young entrepreneurs in Vietnam highlights the role of close interactions with family, relatives and friends in stimulating entrepreneurial activities rather the formality of the business environment.

Enterprises depend on multidimensional resources, including capital, labor and materials, because they cannot self-supply all their business needs. Hence, they must engage in transactions with other enterprises in the market in order to acquire resources. Generally, such transactions may be advantageous, but dependencies may also be created. And household businesses are not an exception. Social capital brings to the enterprise many benefits, but of course there is also the risk of dependencies, as stated by the resource dependence theory (Pfeffer & Salancik, 1978). In the case of household businesses, they can avoid this problem with the micro level of social capital but there are still issues on the macro level. Therefore, besides the benefit obtained from social networks, household businesses also face risk if they have too much dependence on this.

### **3.3 About Vietnamese household businesses**

Household business is one of the forms of ownership/legal status in Vietnam. Household businesses are owned by individuals or families, which produce or distribute goods and services for the market. Recently, the development of household businesses in Vietnam has recorded a significant growth in volume, making tremendous contributions to job creation and service provision for the whole economy. This can be a result of the Doi Moi reform in 1986 with the liberalization of the economy and adoption of the market economy. Currently, household businesses are key players in the Vietnamese economy, generating a total revenue of VND 2,249 billion and creating jobs for nearly 8 million people. However, the contribution of those enterprises to the state budget is still limited; the total tax contribution accounted for

only 2% of the total domestic revenues in 2014<sup>14</sup>. Besides that, even recently, the Vietnamese government has tried to help with many supporting programs, but the business environment for those type of businesses still has many obstacles. Resultingly, these businesses do not want to transform to other types of larger-sized enterprises which have better economic contribution to the development of the whole country.

In a World Bank (2016) report, it is reported that enterprises in Vietnam have to face financial constraints as one of the major difficulties, especially the smaller-sized enterprises since it is more difficult for them to access formal financial resources. The Vietnamese banking sector is heavily regulated, and government officials at all levels still have considerable influence on banking operations (Pham & Talavera, 2018). Although the Vietnamese government has provided financial support programs, which are channeled through the networks of the Social Policy Bank and Vietnam Development Bank, those programs do not seem efficient enough, especially for household businesses. All types of businesses usually use their own close ties with the local government to obtain formal loans from commercial banks or government financial support programs. Therefore, household businesses, micro, small and medium-sized enterprises then also usually seek other sources which are widely used, including informal loans from friends and relatives, informal loans from their business networks or even trade credit from suppliers or customers. However, in household businesses, the level of accessing different sources may strongly depend on the owner including the size of the owner's household, business networks of the firm's owner or the interaction of the owner with the government officials.

Unlike other larger-sized enterprises, the owners of household businesses in Vietnam usually run their own businesses with a less formal management style and use more flexible sources, both paid and unpaid. Children and other members of the family in Vietnam are

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<sup>14</sup> Available at <https://vietnamnews.vn/economy/379100/vn-looks-to-turn-home-firms-into-enterprises.html>

important sources for household businesses, especially when the owners are female. They help to service clients or collect payments; overall, they contribute to reducing the cost by providing free labor (Poon et al., 2012). In addition, one of the reasons that motivates people to find more flexible work through self-employment is to better take care of their own families. So, the wealth of the household including the future career of household members is the main target of the owner, but the household members are also good sources for the development of the household business. Hence, a stronger background of the household can be a sustainable background for the business's growth. Besides, the Vietnamese usually keep close relationships with neighbors or even people who live in the same commune; hence, the owners of household businesses can share knowledge, experiences or customers. The competition among household businesses is not as strong as that among larger-sized enterprises, so they receive more benefits with better or stronger networks.

### **3.4 Methodology**

#### *3.4.1 Models and variable measurement*

In order to figure out the influence of social capital on credit choices of household businesses, equations (1.1) and (1.2) are built. The first equation is used to test the impact of social capital on a firm's choice to receive informal loans, and equation (1.2) is for testing the effect of social capital on a firm's credit choice priority between informal and formal loans.

$$(1.1) \text{INFLOACH}_{it} = \beta_0 + \beta_1 * \text{SOCAP}_{it} + \beta_2 * \text{CONTROLS}_{it} + e_{it}$$

$$(2.1) \text{CRECHOPRI}_{it} = \beta_0 + \beta_1 * \text{SOCAP}_{it} + \beta_2 * \text{CONTROLS}_{it} + e_{it}$$

We consider selection based on firms which actually need a loan; hence, we build an equation that identifies the differences between those who need and those who do not need

financial support. The standard equations (1.1 and 2.1) may produce the estimates with biasness and inconsistency, so we need to build the selection equations, which require the instrument that affects the need for a loan (for both formal and informal loan) but does not affect the decision to get an informal loan. It has been shown that in firms, household enterprises especially face financial constraints when they investigate new techniques or even introduce new products to the market (Hyytinen & Toivanen, 2005; Beck & Demirguc-Kunt, 2006; Pham & Talavera, 2018). Hence, the innovation activities of the firm can be seen as the instrument which impacts whether the firms need to have a loan or not. In this study, the need for financial support is a binary variable, which equals 1 if the firm reports a need for loans and 0 otherwise; innovation is measured by a binary variable which equals one if the firm has introduced new technology or a new product and zero otherwise. Equations 1.2 and 2.2 below are the sample selection equations for both main Equations 1.1 and 2.1.

$$(1.2 \text{ \& } 2.2) \text{ NEED}_{it} = \beta_0 + \beta_1 * \text{SOCAP}_{it} + \beta_2 * \text{CONTROLS}_{it} + \beta_3 * \text{INNO}_{it} + e_{it}$$

For the effect of social capital on growth, equation (3) as below is used to test the following:

$$(3) \text{ GROWTH}_{it} = \beta_0 + \beta_1 * \text{SOCAP}_{it} + \beta_2 * \text{CONTROLS}_{it} + e_{it}$$

Informal loan choice (INFLOACH) is measured as a binary variable on whether the firm has an informal loan or not. It equals one if the firm has at least one informal loan and zero if the firm does not have any informal loan. Credit choice priority (CRECHOPRI) is set up as a binary variable, which is 1 if the firm thinks that informal loans are more important to the firm than formal ones and zero otherwise. Household business growth (GROWTH) is measured by

using two proxies, which are asset growth of household businesses (AGROWTH) and income growth of the households (IGROWTH). Asset growth (AGROWTH) is measured by the change in total assets between the beginning of the surveyed year and the beginning of the last two years from the surveyed year. Ordinal and binary variables are used to measure household income growth (IGROWTH). For the ordinal variable of household income growth (OIGROWTH), it equals zero if the household's income decreases over the year; one if the household's income keeps stable over the year; two if the household's income increases by 0 to 25% over the year; three if the household's income increases by 25 to 50% over the year; four if the household's income increases by 50 to 100% over the year and five if the household's income increases over 100% over the year. The binary variable of household income growth (BIGROWTH) is one if the household's income increases over the year and zero otherwise. Human capital includes household size (HSIZE), professional education of a firm's owner (EDU) and the professional career experience of the household's members (EXP). HSIZE is the number of members in a household of the firm's owner that are aged 15 and above, since they can help the owner in running the firm. EDU is a binary variable, with a value of one when the owner is educated professionally. Social networks include Communist Party membership (CPMEM) by the owner, the number of people in the social network (SOCNW), business association membership (BAMEM) and government assistance (GASSIS). We include owner age (OAGE), owner gender (OGENDER), firm age (FAGE), firm size (FSIZE) and labor force size (LABOR) as the control variables in this study. OAGE is the age of the owner of the household business (Markussen & Tarp, 2014); OGENDER is a binary variable, which equals one if the owner is male and zero if the owner is female. Older or female owners may prefer the traditional ways in running business; hence, they may think about formal loan first when they need external financing support (Markussen & Tarp, 2014). Besides that, larger or older firms can be more experienced in dealing with financial need,

which influences their credit choices. The labor force of household businesses, whom the owners can ask for informal loans, can be seen as the source for external financing. We also think those characteristics can also impact on the growth of household businesses. Accordingly, age and gender of owner affect the firm risk level; the firm risk level is smaller with a female owner compared with a male owner, in which matter in terms of firm performance and growth (Khan & Vieito, 2013). Larger and older firms tend to have lower growth opportunities than the younger and smaller ones; however, in household businesses, those with larger size and older age can have a more solid background for growth. Furthermore, labor force plays an important role in creating value for the firms. Table 3.1 shows the variable definitions in detail.

[Insert Table 3.1 here]

The topics of social capital and firm growth may need to deal with the problem of endogeneity. However, in the case of household businesses, this may not be a big problem. In the larger-sized enterprises where the director board tends to choose a CEO with better social networks in order to take the advantages from his/her networks, hence, the position of CEO can be changed. In household businesses, the owner runs his/her own business with a target of making profit for his/her own business and other related people inside the household (or even for society). Furthermore, social networks of household business owners are mostly affected by his/her own perception and characteristics, which are exogenous. Based on the special features of household businesses, we exclude the issue of endogeneity in this study.

### 3.4.2 Data

We use the data from surveys carried out in collaboration between the Institute of Labour Studies and Social Affairs (ILSSA) in the Ministry of Labour, Invalids and Social Affairs



(MOLISA) and Department of Economics, University of Copenhagen with funding from DAN- IDA in 2011, 2013 and 2015. We start with 4,971 firm-year observations including 1,716 observations in 2011, 1,590 observations in 2013 and 1,665 observations in 2015. We eliminate 1,158 firm-year observations due to unavailable information, which leads to a final sample of 3,813 firm-year observations, which include 1,127 observations in 2011, 1,322 observations in 2013 and 1,364 observations in 2015. Those household businesses are located at 9 provinces: Hanoi, Ho Chi Minh City, Haiphong, Khanhhoa, Lamdong, Longan, Nghean, Phutho and Quangnam.

Out of the 3,813 firm-year observations, 1,828 are located in urban areas including Hanoi, Ho Chi Minh City and Haiphong, which accounted for 47.94%; 1,985 are from rural areas. Table 3.2 presents an overview of the sample with three panels. Panel A shows firm locations between urban vs. rural regions and among different provinces. Panel B draws a summary of firms by years and location, and panel C provides a description of unbalanced observations over years.

[Insert Table 3.2 here]

The table 3.3 presents the descriptive statistics of the variables. We winsorized all continuous variables at 5% level. The table shows that 45% (1,726 firm-year observations) of total observations have at least one informal loan while 21% of total observations think that informal loans are more important than the formal ones. AGROWTH is on average about 24%. The average number of household members (HSIZE) is about 4 and only 14% of the owners have professional education background (EDU). The average number of social network people (SOCNW) of household businesses' owners is about 27. Only 6% of the owners are the members of Communist Party (CPMEM) and only 4% of the owners are member of at least

one business association (BAMEM). Table 3.3 also indicates that only 8% of the total observations state that they receive assistance from the government (GASSIS). It is noteworthy that the local governments do not provide strong support for household businesses.

[Insert Table 3.3 here]

Pearson correlation coefficients are presented in Table 3.4. Both the micro and the macro level of SOCAP are correlated with INFLOACH, CRECHOPRI and GROWTH. While the correlation is positive for HSIZE, EDU and EXP; CPMEM is negatively correlated with INFLOACH, CRECHOPRI and GROWTH. SOCNW is positively correlated with INFLOACH and CRECHOPRI but negatively correlated with GROWTH. BAMEM is negatively correlated with INFLOACH, positively correlated with CRECHOPRI and does not correlate with GROWTH. GASSIS is negatively correlated with INFLOACH and GROWTH. Among control variables, FSIZE is positively correlated with all dependent variables while OAGE and FAGE are negatively correlated with INFLOACH and CRECHOPRI. OGENDER is positively correlated with CRECHOPRI.

[Insert Table 3.4 here]

### **3.5 Data analysis results**

#### *3.5.1 Social capital and credit choices*

Table 3.5 displays the regression results for the various samples of the impact of social capital on credit choices of household businesses. For the regression, we rely on using Heckprobit estimations. The table comprises two panels: panel A for informal loan choice and panel B for credit choice priority between informal and formal loan.

Panel A of table 3.5 shows that the coefficients of HSIZE, EDU and EXP are positively significant. This is consistent with the expectation that firms with larger households are more likely to choose informal loans, because the pool of relatives as potential lenders is bigger. Besides, the positive coefficient of EDU and EXP indicates that a better educational background or even professional experience of the household members can help the owner to better understand the benefits of informal loans, especially for household businesses, so that again increases the probability of choosing informal loans when financial support is needed. The economic significance of the effect of an owner with professional education background is an increase of 64.66 percentage points of probability of choosing informal loans compared to the case of an owner without professional education background. Summing up, both levels of social capital affect the choice of informal loans.

For the macro level of social capital, the results from panel A show that the coefficients of BAMEM and GASSIS are significantly negative, while the coefficient of SOCNW is significantly positive. The positive coefficient of SOCNW indicates that the probability of choosing informal loans increases with the size of the social network, because the firms may ask for informal loans from their social connections. In contrast, the negative coefficients of GASSIS and BAMEM are consistent with the idea that the better support from local governments or business associations in which the owner has the membership, the more help firms can get to receive formal loans from banks or other financial institutions. Membership in business associations can also be a good reference when the owners apply for bank loans, or the associations can help the owners to have better preparation for the bank loan applications. Hence, better support from the government or business association membership facilitate access to formal loans and therefore decrease the probability of choosing informal loans. In contrast, membership in the Communist Party does not influence on the probability of choosing informal loans, the coefficient is insignificant.

Among the control variables only LABOR is significantly positive. It is consistent with the expectation that firms with bigger labor force have higher probability of choosing informal loans. None of the other coefficients (OAGE, OGENDER, FAGE and FSIZE) is significant.

Panel B of table 3.5 displays the impact of social capital on the credit choice priority between informal and formal loans using Heckprobit estimations. The results also confirm that both levels of social capital influence informal loan priority. The significantly positive regression coefficients of HSIZE, EDU and EXP are consistent with the expectation that bigger household size, stronger professional education background or better experience increase the probability of prioritizing informal loan choice. In average, owners with a professional educational background increase the probability of prioritizing informal loans by 41.39 percentage points. Panel B of table 3.5 also indicates that while the coefficient of CPMEM is significantly negative, the coefficient of SOCNW is significantly positive. In average, Communist Party membership of owner can lower the probability of prioritizing informal loan choice by 50.21 percentage points in comparison with the case of owner without. In contrast, BAMEM and GASSIS do not affect the probability on informal loan choice priority.

Only two of the control variables, namely OAGE and FSIZE, are significantly negative, whereas the coefficients of OGENDER, FAGE and LABOR are insignificant. We thus conclude that older owner owners and larger firms are less likely to choose informal loans.

[Insert Table 3.5 here]

### *3.5.2 Social capital and growth*

While the result in Tables 3.5 focused on loan choices, Table 3.6 presents the impact of social capital on growth. We measure growth by asset growth rate (AGROWTH) and

household income growth (IGROWTH) respectively. Accordingly, there are two panels: the first panel for social capital and asset growth and the second panel for social capital and household income growth, which is measured by two proxies: Income growth ordinal (OIGROWTH) and binary (BIGROWTH).

In panel A of table 3.6, we find that all the coefficients on the micro level (HSIZE, EDU and EXP) are significantly positive whereas the coefficients on the macro level (CPMEM, SOCNW, BAMEM and GASSIS) are not significant. We therefore conclude that in household businesses the support from the household is more important for economic growth than their social networks and connections. The significantly positive coefficients of HSIZE, EDU and EXP are consistent with the expectation that firms with larger household size, owners with professional educational background or more work experience from household members can rely on more support, which translates into higher firm growth (AGROWTH). In contrast, the macro level of social capital does not increase the asset growth rate (AGROWTH).

[Insert Table 3.6 here]

Different from larger-sized enterprises, the main and final purpose of household enterprises is to provide income for the household itself. Hence, we continue to by looking at the household income growth – measured by binary and nominal variables – in panel B of table 3.6. Again, we find that the micro level of social capital influences the growth of household income, while the macro level does not. The results are therefore consistent with those shown in panel A for asset growth: The coefficients of HSIZE, EDU and EXP are significantly positive and those of CPMEM, SOCNW, BAMEM and GASSIS are insignificant. An intuitive explanation is that the owners, with the help, support and encouragement of the members of

the household, will focus on maximizing benefit and wealth of the households, which translates into an increase in household income growth.

For the control variables, in all estimation results, the coefficient of OAGE is significantly negative, thus younger owners may have a stronger motivation for firm growth and also for income growth of the household than older ones. The positive coefficient of FSIZE indicates that firms with more assets can have a more solid background to create more value, which contributes to higher household income growth.

### **3.6 Conclusions**

Heckprobit estimations reveal that social capital impacts on a firm's credit choices at both micro and macro levels. With the support of the members in the household, the firm's owner can get informal loans from them. Besides, the number of network people and Communist Party membership of the firm's owner can influence to the owner's credit policy in choosing informal loans and also the priority choice between informal and formal loan. It can be explained that with stronger social networks, firms can easily ask for financial support from them. Moreover, firm's owners with Communist Party membership can have stronger connections with the local governances, therefore, firms are more likely to have access to formal financial resources.

It is interesting in the results that while both levels of social capital influence credit choices of household businesses, only the micro level of social capital assists in firm asset growth and household income growth. The members of the household can help the firm's owner as internal resources with unpaid and better productivity labor force; they can even share their own professional experience in order to improve firm growth and the household's wealth. The better education background of the owner can also support him/her in managing his/her own business with better innovation, new technologies or updated management styles.

This study does not focus on the benefits of informal or formal loans, with the belief that each type of loan has pros and cons and both are supporting firms with financial needs. Because household businesses are a special firm type with less formal business management and they live in the communes, social capital at micro and macro levels plays an important role in their business management styles and also their business's growth.

The resource dependence theory argues that while social capital brings to the enterprises many benefits, dependencies may also be created if the enterprises greatly depend on this resource. When we divide social capital into two different levels of micro and macro, household businesses may get risk-free benefits from their micro level of social capital since it is the support from their family members who have very close relationships with the owners. However, when the enterprises rely greatly on other resources outside the enterprises, they may need to face risks, and it can influence firm growth. Hence, the macro level of social capital can be seen as both a helping hand and grabbing hand for the enterprises.

Overall, some implications may be drawn from this study since it gives a better understanding about household businesses in an emerging market and a network-oriented country like Vietnam. First, at a micro level, the firm should rely on the internal resources of the owner's household since they are profitable and valuable. Second, at a macro level, government, financial institutions and other social associations should better support household businesses because they bring many benefits and value to the whole society. On the one hand, household businesses receive the informal support from household members; and vice versa, all the members benefit when the firm profits. And of course, if each individual gets better, the whole society is better. On another hand, household businesses are the first step or the foundation for the larger-sized enterprises in the future, which brings larger contributions to the economy.

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## TABLES

Table 3.1 Variable definitions

Variable	Definition
INFLOACH	Binary variable 1 if the firm has at least one informal loan and 0 otherwise.
CRECHOPRI	Binary variable 1 if the firm thinks that informal loans are more important than formal loans and 0 if the firm thinks that formal loans are more important than informal loans.
AGROWTH	Asset growth It is measured by the change in total assets between the beginning of surveyed year and the beginning of the last two years from the surveyed year.
BIGROWTH	Income Growth (binary) 1 if the household's income increases over the year and 0 otherwise.
OIGROWTH	Income Growth (Ordinal) 0 if the household's income decreases over the year. 1 if the household's income keeps stable over the year. 2 if the household's income increases by 0-25% over the year. 3 if the household's income increases by 25-50% over the year. 4 if the household's income increases by 50-100% over the year. 5 if the household's income increases over 100% over the year.
NEED	Binary variable 1 if the firm reports a need for a loan and 0 otherwise.
OAGE	The age of the firm's owner

Table 3.1 (cont'd)

Variable Name	Definition
OGENDER	The gender of the firm's owner 1 for male, 0 for female.
FAGE	The age of firm.
LABOR	The number of employees of the firm.
FSIZE	The logarithm of the total asset.
<i>Social Capital: Micro Level - Human Capital</i>	
HSIZE	The number of members in the household of the firm's owner.
EDU	Binary variable 1 if the highest professional education completed of the firm's owner is vocational college/college/university or higher and 0 if it is below.
EXP	The number of household members with professional full-time paid jobs.
<i>Social Capital: Macro Level - Social Networks</i>	
CPMEM	Binary variable 1 if the firm's owner is a member of the Communist Party, 0 otherwise.
SOCNW	The number of social network people who the firm's owner has currently contacted and the connections are useful for the business operations.
BAMEM	Binary variable 1 if the firm's owner has the membership with at least one business association and 0 otherwise.
GASSIS	Binary variable 1 if the firm receives assistance from government and 0 otherwise.

Table 3.2 Sample description

Panel A. Firms by location

Firm location	Urban	Ha Noi	Ho Chi Minh city	Haiphong
Number	1828	948	648	232
%	47.94	24.86	16.99	6.08

Firm location	Rural	Khanh Hoa	Lam Dong	Long An	Nghe An	Phu Tho	Quang Nam
Number	1985	144	138	243	642	500	318
%	55.76	3.78	3.62	6.37	16.84	13.11	8.34

Panel B. Firms by year and location

Year	Ha Noi	Ho Chi Minh city	Hai Phong	Khanh Hoa	Lam Dong	Long An	Nghe An	Phu Tho	Quang Nam	Total
2011	291	173	70	48	32	69	215	137	92	1127
2013	308	221	82	51	49	82	235	180	114	1322
2015	349	254	80	45	57	92	192	183	112	1364
Total	948	648	232	144	138	243	642	500	318	3813



Panel C. Unbalanced observations over years

Number of firms	2011	2013	2015
771	x	x	x
335		x	x
154	x	x	
12	x		x
246			x
190	x		
62		x	
Total	1,127	1,322	1,364

Table 3.3 Descriptive statistics

Variable	Mean	S.D.	Min	Max
INFLOACH	0.45	0.5	0	1
CRECHOPRI	0.21	0.41	0	1
AGROWTH	0.24	0.76	-0.685	3.463
OIGROWTH	1.16	1.54	0	5
BIGROWTH	0.33	0.47	0	1
HSIZE	4.21	1.09	2	10
EDU	0.14	0.35	0	1
EXP	1.87	0.78	0	6
CPMEM	0.06	0.24	0	1
SOCNW	27.55	15.71	7	66
BAMEM	0.04	0.2	0	1
GASSIS	0.08	0.28	0	1
OAGE	53.43	9.05	38	70
OGENDER	0.66	0.47	0	1
FAGE	22.45	7.92	5	40
LABOR	7.11	5.05	2	19
FSIZE	1,663.1	1,885.5	58.6	7,235

Notes:

For variable definitions: see Table 3.1.

\*, \*\*, \*\*\* for statistical significance at 10%, 5% and 1% level respectively.

Firm size is total assets in million VND.

All variables are winsorized at the 5% level.

Table 3.4 Correlation coefficients

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1 INFLOACH	1																
2 CRECHOPRI	0.23 ***	1															
3 AGROWTH	0.07 ***	0.09 ***	1														
4 OIGROWTH	0.09 ***	0.1 ***	0.62 ***	1													
5 BIGROWTH	0.08 ***	0.09 ***	0.76 ***	0.89 ***	1												
6 HSIZE	0.07 ***	0.21 ***	0.2 ***	0.39 ***	0.33 ***	1											
7 EDU	0.11 ***	0.12 ***	0.25 ***	0.25 ***	0.26 ***	0.13 ***	1										
8 EXP	0.14 ***	0.21 ***	0.22 ***	0.37 ***	0.32 ***	0.31 ***	0.22 ***	1									
9 CPMEM	-0.07 ***	-0.07 ***	-0.06 ***	-0.09 ***	-0.09 ***	-0.04 ***	-0.05 ***	-0.09 ***	1								
10 SOCNW	0.13 ***	0.13 ***	-0.07 ***	-0.08 ***	-0.08 ***	0.03 **	0.03 *	0.07 ***	0.029 *	1							
11 BAMEM	-0.03 ***	0.08 ***	-0.02 ***	-0.02 ***	-0.03 ***	-0.02 ***	0.00 ***	-0.01 ***	0.07 ***	0.01 ***	1						
12 GASSIS	-0.08 ***	0.002 ***	-0.07 ***	-0.08 ***	-0.08 ***	-0.05 ***	-0.02 ***	-0.05 ***	0.28 ***	0.02 ***	0.3 ***	1					
13 OAGE	-0.07 ***	-0.13 ***	0.01 ***	0.00 ***	0.01 ***	-0.06 ***	-0.01 ***	0.08 ***	0.13 ***	-0.03 **	0.02 ***	0.04 **	1				

Table 3.4 (cont'd)

	Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
14	OGENDER	0.01	0.03	0.02	0.02	0.02	0.01	0.05	-0.01	0.05	-0.06	0.00	0.01	0.04	1			
			**					***		***	***			**				
15	FAGE	-0.07	-0.05	-0.01	-0.01	0.00	-0.05	-0.04	0.04	0.03	-0.02	0.02	0.04	0.33	-0.03	1		
		***	***				***	***	***	**			**	***				
16	LABOR	0.17	0.11	0.01	0.03	0.02	0.01	0.04	0.06	-0.03	0.05	0.11	-0.01	-0.03	0.02	-0.05	1	
		***	***		*			***	***	**	***	***		*		***		
17	FSIZE	0.1	0.05	0.09	0.06	0.06	0.03	0.08	0.07	-0.02	0.06	0.06	0.00	0.07	0.06	-0.05	0.37	1
		***	***	***	***	***		***	***		***	***		***	***	***	***	

Notes:

For variable definitions: see Table 3.1.

\*, \*\*, \*\*\* for statistical significance at 10%, 5% and 1% level respectively.

All continuous variables are winsorized at the 5% lev

Table 3.5 Estimation results: Social capital and credit choices

Panel A. Social capital and informal loan choice

Model #	(1)		(2)	
D. V.	INFLOACH			
	Coef.	p-value	Coef.	p-value
HSIZE	0.0701**	0.011		
EDU	0.6466***	0.000		
EXP	0.0903**	0.022		
CPMEM			-0.1656	0.185
SOCNW			0.0183***	0.000
BAMEM			-0.1892*	0.073
GASSIS			-0.2897**	0.012
OAGE	-0.0034	0.314	-0.0026	0.432
OGENDER	-0.0845	0.145	-0.0847	0.145
FAGE	-0.0042	0.272	-0.0059	0.127
LABOR	0.0272***	0.001	0.0282***	0.000
FSIZE	-0.0436	0.116	-0.0236	0.398
Province controls	Yes		Yes	

Panel A (cont'd)

Selection equation instrument	NEED		NEED	
INNO	0.5073 <sup>***</sup>	0.000	0.5109 <sup>***</sup>	0.000
Selectivity Correction				
LR test of indep. Eqns. ( $\rho = 0$ )	9.00 <sup>***</sup>	0.002	16.59 <sup>***</sup>	0.000
Wald chi2 for sig. of augmented regression	41.63 <sup>***</sup>	0.000	33.71 <sup>**</sup>	0.013
Obs	2689		2689	

Notes:

For variable definitions: see Table 3.1.

\*, \*\*, \*\*\* for statistical significance at 10%, 5% and 1% level respectively.

All continuous variables are winsorized at the 5% level.

Panel B. Social capital and credit choice priority

Model #	(3)		(4)	
D. V.	CRECHOPRI			
	Coef.	p-value	Coef.	p-value
HSIZE	0.6575***	0.000		
EDU	0.4139***	0.000		
EXP	0.1982***	0.003		
CPMEM			-0.5021***	0.000
SOCNW			0.0264***	0.000
BAMEM			0.0512	0.603
GASSIS			-0.1020	0.315
OAGE	-0.0169***	0.002	-0.0088***	0.008
OGENDER	-0.0146	0.870	-0.0089	0.879
FAGE	0.0044	0.454	-0.0025	0.496
LABOR	0.0091	0.281	0.0005	0.930
FSIZE	-0.1026**	0.020	-0.0012	0.964
Province controls	Yes		Yes	

Panel B (cont'd)

Selection equation instrument	NEED		NEED	
INNO	0.5327***	0.000	0.5225***	0.000
Selectivity Correction				
LR test of indep. Eqns. (rho = 0)	5.28**	0.021	22.37***	0.000
Wald chi2 for sig. of augmented regression	86.50***	0.000	149.45***	0.000
Obs	2689		2689	

Notes:

For variable definitions: see Table 3.1.

\*, \*\*, \*\*\* for statistical significance at 10%, 5% and 1% level respectively.

All variables are winsorized at the 5% level.



Table 3.6 Estimation results: Social capital and growth

## Panel A. Social capital and asset growth

Model #	(1)		(2)	
D. V.	AGROWTH			
	Coef.	p-value	Coef.	p-value
HSIZE	0.0889***	0.000		
EDU	0.3458***	0.000		
EXP	0.0613***	0.000		
CPMEM			-0.0144	0.733
SOCNW			-0.0007	0.308
BAMEM			-0.0304	0.563
GASSIS			-0.0485	0.217
OAGE	-0.0034**	0.010	-0.0042***	0.002
OGENDER	0.006	0.801	0.017	0.487
FAGE	0.0004	0.775	0.0001	0.991
LABOR	-0.0046*	0.066	-0.0036	0.158
FSIZE	0.1068***	0.000	0.1208***	0.000
Year controls	Yes		Yes	
Province controls	Yes		Yes	
Observation	3813		3813	
R Squared/Pseudo R Squared	0.1854		0.1307	

Panel A (Cont'd)

F	36.94 <sup>***</sup>	24.20 <sup>***</sup>
Prob > F	0.000	0.00

Notes:

For variable definitions: see Table 3.1.

\*, \*\*, \*\*\* for statistical significance at 10%, 5% and 1% level respectively.

p-values based on standard errors that are robust to heteroscedasticity.

All variables are winsorized at the 5% level.

Panel B. Social capital and household income growth

Model #	(3)		(4)		(5)		(6)	
D. V.	OIGROWTH				BIGROWTH			
	Coef.	p-value	Coef.	p-value	Coef.	p-value	Coef.	p-value
HSIZE	0.2911***	0.000			0.8339***	0.000		
EDU	0.4043***	0.000			0.7405***	0.000		
EXP	0.1933***	0.000			0.5757***	0.000		
CPMEM			-0.094	0.320			-0.141	0.481
SOCNW			-0.0005	0.692			-0.0008	0.751
BAMEM			-0.0832	0.417			-0.0942	0.659
GASSIS			-0.0211	0.802			-0.025	0.887
OAGE	-0.0065***	0.005	-0.0073***	0.001	-0.0187***	0.001	-0.0178***	0.000
OGENDER	0.0341	0.405	0.0455	0.260	0.1423	0.137	0.135	0.113
FAGE	0.0035	0.195	0.0029	0.274	0.0036	0.556	0.0015	0.787
LABOR	-0.0031	0.452	-0.0015	0.709	-0.004	0.663	0.0008	0.929
FSIZE	0.1073***	0.000	0.1276***	0.000	0.1972***	0.000	0.2270***	0.000
Year controls	Yes		Yes		Yes		Yes	
Province controls	Yes		Yes		Yes		Yes	
Observation	3813		3813		3813		3813	
R Squared/Pseudo R Squared	0.1296		0.0814		0.3316		0.1808	
Wald Chi2	1485.95***		855.54***		1023.55***		735.19***	
Prob>Chi2	0.000		0.000		0.000		0.000	

Notes:

For variable definitions: see Table 1.

\*, \*\*, \*\*\* for statistical significance at 10%, 5% and 1% level respectively.

p-values based on standard errors that are robust to heteroscedasticity.



## **CHAPTER 4**

## **CONCLUSION**

This dissertation has analyzed three aspects of firm governance in Vietnam. Those aspects are corruption (chapter 1), political connections (chapter 2) and social capital (chapter 3). Those aspects are linked other factors discussed in the dissertation, such as the business environment, and ownership.

The chapters are also linked with each other, where the relation between corruption and political connection is twofold. (i) On the one hand, it can serve as a substitute for political connections, i.e. the advantages that some firms have through formal or informal ties with the governments can also be achieved by corruption. (ii) On the other hand, we can assume a feedback between political connections and corruptions in the sense that firms with political connections can allow to be more resistant against the need to take part in corruption, which would lead to a negative relation between them in the spirit of consideration (i). Or political connections could increase the readiness to be involved in corruption since it allows the politically linked firm staff to withdraw money from the firm for private purposes. The latter implies a positive relation between corruption and political connections.

The answer which effect dominates is rather an empirical one, and beyond the scope of the dissertation. We leave it to future research on the topic.

Chapter 3 looks at social capital. We split up social capital into two components, a micro and a macro component, where the latter includes factors such as business association membership, communist party membership, government assistance and social network activities. Those factors refer to the previous chapters and directly address political connections and to some extent also corruption.

While the dissertation's title is 'Governance and Firm Efficiency in Vietnam', the reader may be surprised that efficiency is not directly addressed in the text. It is, however, implicitly present

throughout the whole dissertation, since corruption and political connections are known main constraints for firm efficiency in emerging economies.

#### **4.1 Summary of the individual research projects**

In the first research project, we investigate the impact of corruption on firm growth in Vietnam to answer the question that why corruption brings many negative effects to the whole economy, but it does still exist in the economy for such a long time at a very high level? In order to answer the question, the study figures out that while corruption harms firm growth of shareholding (SHEs), foreign-owned (FOEs) and non-state-owned enterprises (non-SOEs), it helps SOEs in increasing their growth. These results corroborate with agency theory. Corruption, which is known as bribery money, may lead to information asymmetry and, therefore, an increase in agency costs along with a decrease in firm growth. Conversely, a statistically significant positive relationship between corruption and the growth of SOEs, and non-SHEs can be explained that a good relationship with government provides SOEs and non-SHEs with advantages. While SOEs in Vietnam are known as the ones who have very strong relationships with the Vietnamese Government; managers of SOEs are also known as politicians, and therefore, SOEs can benefit from their connections and of course, they have to pay for that. For non-SHEs and non-FOEs, they may face agency problems; hence, the more they pay, the bigger the advantages they get.

We also document that the difference in the levels of corruption across different provinces can be influenced by the quality of the local business environment, which is measured by the provincial competitiveness index (PCI); but again, those impacts are heterogeneous in firms with different ownership identities.

In the second research project, we provide the influence of political connections on firm value of listed firms in Vietnam by splitting up political connections (PCs) into two different types, namely acquired and ascribed ones. We find that although firms with both ascribed and acquired PCs have lower firm value (FV) than firms without any PCs; firms with acquired PCs exhibit better FV than those with ascribed PCs. The study also reveals that concentrated ownership (CO) has a moderation impact on the association between acquired PCs and FV while it can help firms with acquired PCs in improving FV.

Emerging economies are known for weak rules of law, weak regulatory environment, poor investor protection and high level of corruption. Hence, in those economies, the business elites potentially exploit their political linkages to influence the system in accumulating their own wealth at the expense of general shareholders (Li et al., 2008; Mutakin et al., 2015). Hence, politically connected firms in any case, especially acquired politically connected firms, have to make or bear the informal payments or the informal cost of creating or maintaining connections with politicians. Moreover, SOEs in emerging economies, especially in Vietnam, are always part of the political system (Nguyen, 2003) and enjoy many priorities (Nguyen, 2006). They typically claim a disproportionate share of national investment in land, property and physical assets resulting in a less than proportionate increase in enterprise performance (Minor et al., 2017); and also resulting in low firm efficiency. The political and bureaucratic interference together with state ownership have made SOE's control and monitor systems for political interest rather than effectiveness; that is the reason why SOEs, which are known as firms with ascribed PCs, have weaker motives to pursue profit and efficiency than those in privately-owned firms.

Although informal expenses can rise in acquired politically connected firms, it cannot be denied that firms can receive many benefits from their connections with political powers. In the case



that firms can lower the costs brought from PCs and maximize the benefit, which they can get from their PCs, firms can get the advantages. In this study, we find that with CO, acquired politically connected firms can have better FV than those with diffuse ownership and also firms without any PCs. It can be explained that in firms with diffuse ownership, acquired PCs can cause an increase in agency problems along with agency costs due to asymmetric information; but in contrast, acquired politically connected firms with CO can avoid the increase of agency problem. Moreover, CO can help acquired politically connected firms focusing more on maximizing profits or advantages they can get from their PCs. In developed markets, a strong institutional setting and strong corporate governance may help shareholders in monitoring the PCs; but in emerging economies, with the absence of a strong institutional environment and strong corporate governance, political agents may engage in wealth expropriation at the expense of other shareholders, especially minority shareholders.

In the third research project, we figure out the effect of social capital on credit choices and growth of household businesses. In this study, social capital is considered at different levels: micro for human capital and macro for social networks. We consider social network including Communist Party membership, the size of the social network, business association membership and government assistance for household businesses. It concludes that while both levels of social capital influence on credit choices of household businesses; only the micro level of social capital plays an important role in improving the household business's growth including both asset and income growth.

The results reveal that social capital affects firm's credit choices at both micro and macro levels. With the support of the members in the household, the firm's owner can get informal loans from them. Besides, the size of the network and Communist Party membership of firm's owner can influence to the owner's credit policy in choosing informal loan and also the priority choice between

informal and formal loan. It can be explained that with stronger social networks, firms can easily ask for financial support from them. Moreover, in case that firm's owners are the members of Communist Party, firms are more likely to access to formal financial resources.

It is an interesting result that, while both levels of social capital influence on credit choices of household businesses, only the micro level of social capital can explain firm growth. The members of the household can help the firm's owner as internal resources with unpaid and better productivity labor force or even sharing their own professional experience in order to improve firm growth and household wealth. The better educational background of the owner can also support him/her in managing his/her own business with better innovation, new technologies or more sophisticated management techniques. This can be explained by resource independence theory that social capital is a helping hand of the enterprises but dependencies may also be created. With the micro level of social capital, firms may benefit at a low risk, but they need to face problems of independence from their resources if they much depend on the macro level of social capital.

## **4.2 Practical implications**

In addition to contributing to the academic literature, the findings in this dissertation may be of interest for practitioners.

The results of the first research project confirm that corruption is a big problem of developing countries since it may harm economic growth, especially for the growth of shareholding and foreign-owned enterprises but it favors the growth of state-owned enterprises. Managers from emerging countries can learn from this research that bribery creates information asymmetry, which decrease firm growth. Besides that, the results also show that good quality of the local business environment can help shareholding and foreign-owned enterprises to avoid of making informal payment when

state-owned enterprises even need to pay more to get benefits. This implies that the local business environment, plays an important role in combating corruption. This is also a lesson for the Vietnamese Government in pushing for reforms to reduce time consuming and wasteful administrative procedures in order to improve the quality of business environment to reduce corruption.

The results of the second research project show that both cases of ascribed and acquired political connections have negative impacts on firm value but acquired political connected firms with concentrated ownership can exhibit a higher firm value than others. Managers can learn from this research that political connections do not bring firms with just benefits but also costs that harm the firm value.

The results of the third research project show that both levels of social capital have an impact on credit choices of household business in Vietnam including informal loan choice and credit choice priority between informal and formal loans; however, only the micro level of social capital plays an important role in improving the growth of household businesses. The owners of the household can learn from this research that the household itself can be the good resource for the household business with free labor, better productivity, sources for external financing, etc. The results also suggest that the local governments in Vietnam y should have better support for household businesses since this sector creates a huge value and has substantially contributes to society.

### **4.3 Limitations and suggestions for future research**

The three empirical chapters of this dissertation are not without limitations. These may have partially affected the accuracy of the results presented or can be the reasons why some of the results were not statistically significant.

First, we use the data from the enterprise surveys of World Bank for the first research project and surveys carried out in collaboration between the Institute of Labour Studies and Social Affairs (ILSSA) in the Ministry of Labour, Invalids and Social Affairs (MOLISA) and the Department of Economics, University of Copenhagen, for the third research project. However, the financial information is limited, which may have some impact on the results. An interesting avenue for future research would be using databases with better financial information since this would allow to have more precise measures for firm performance.

Second, there are non-linear effects between political connections and firm value if we can use the measure with different degrees of political connections. However, it is not easy to build up an index for political connections, which can be used in non-linear regression models. Future research can develop an index with different degrees of political connections to give a broader picture about the effects of political connections.

Third, we measure corruption based on the perception of firms regarding whether they need to make informal payments and the judgment about how corrupt the local business and industrial environments are, rather than the actual level of corruption that firms face. It means that corruption is measured at firm-perceived level since the actual level is difficult to measure. Another venue for future research that could be promising is to explore the impact of corruption on growth at actual firm level.

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